

**Finding what you seek: the role of serendipity in consumer enjoyment of the online  
book-buying process**

A mixed-methods study

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### **ABSTRACT**

Serendipity is often associated with the fortuitous finds of scientific breakthroughs, and extant literature has focused on this phenomenon as a valuable tool for the searching scientist. Yet serendipity is also a valuable aspect of lived experience, bringing with it a sense of joy, luck and wonder. In a world that is increasingly digitalised and designed to show us what we seek, serendipity is at risk of becoming obsolete. This study looks at serendipity in the context of online book retail, to examine whether it can increase the enjoyment of the online book-buying experience. A quantitative survey was employed to explore the connection between the two variables of serendipitous experiences and enjoyment, with a Pearson correlation analysis finding a weak to moderate connection between the two. In-depth interviews unravelled this connection further, exploring the dimensions that contributed to the increase in serendipitous finds online and positively affected enjoyment. Results show that although the survey indicated a correlation between serendipity and enjoyment, this connection is not likely to be causative. Instead, the mutual dimension of browsing links the two variables; when consumers are motivated to speculatively browse online, they enjoy the process more and simultaneously discover more unexpected items. Therefore, it is proposed that if online book retailers are to increase consumer enjoyment of their sites, they should focus on tools that will increase consumers' propensity to browse.

**KEYWORDS:** serendipity, online shopping, books, shopping motivations, browsing

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## **1: Introduction**

The word serendipity was coined by Horace Walpole in 1754 in reference to the fairy-tale *The Three Princes of Serendip* (van Andel, 1994). It has since been developed and defined in a variety of academic contexts (see Grange et al., 2019, p. 226). It is most famous for its beneficial effect on the development of the world's most famous scientific discoveries; from Newton's fallen apple to Fleming's petri-dish penicillin. The benefit of serendipity has also been recognised in studies regarding changing methods of information gathering in academic environments (Case, 1991; Cooksey, 2004; Hoeflich, 2007; Makri & Blandford, 2012). As research articles have become increasingly digitalised, academics have emphasised the importance of maintaining possibilities for 'serendipity in the stacks' (Hoeflinch, 2007, p.813). Yet serendipity, whilst valuable for the scientist and researcher, is also an enjoyable aspect of lived experience. It facilitates the 'aha' moment of the scientist (Makri et al. 2014), but also the everyday joy of feeling lucky (Foster & Ford, 2003). Therefore, serendipity also plays a role in the experiential intensity of daily activities (Rubin et al., 2011). It is this valued aspect of the serendipitous experience that will be evaluated in this study, in the context of online book retail.

Online shopping has experienced a rapid growth in recent years due to the advantages it holds for both customers and retailers (Cheema et al., 2013). Models such as the technological acceptance model (TAM) (Davis, 1989) have been used to examine user perceptions of online interfaces, focusing on perceived usefulness and ease of use as factors corresponding to technological acceptance. Yet more recently, enjoyment and interaction have been included as important factors in customer's propensity to shop online (Kim et al., 2007; Scarpi et al., 2014; Sohail et al., 2013). Retailers have become concerned with the ways they can improve customer experience by facilitating greater experiential satisfaction (Oku & Hattori, 2012; Grange et al., 2019). This research will contribute to this theoretical strand, by examining the experiential role serendipity can hold as part of the online book-buying process.

### **1.1 Understanding the online consumer**

For online retailers looking to increase user satisfaction during the online shopping experience, increasing experiential intensity by inciting serendipity may be beneficial (Kim et al., 2017). My research will explore the importance of serendipity and its effect in the online

bookstore environment. To understand this, theories regarding shopper orientations and motivations will be utilised.

Shopping motivations have traditionally been categorised as either hedonic or utilitarian (Babin et al., 1994; Hirschman & Holbrook, 1982). The difference between the two is summarised by Wolfinbarger and Gilly (2001): consumers either ‘shop to acquire’ or ‘shop to shop’ (p. 34). As will be explained, the motivation of shoppers is expected to influence the enjoyment they experience in the process, and their propensity to browse serendipitously. Shopping motivation will therefore be a key theoretical underpinning of this study. Shopping motivation intersects with shopping orientation, a further factor that is understood to affect shopper perceptions. It is defined as the ‘styles that place particular emphasis on certain activities’ (Shim & Kotsiopulos, 1993, p. 73), and affects the ways in which consumers react to stimuli instore or online, such as atmospheric cues (Lumpkin, 1985) or product range (Gutman & Mills, 1982). This study will focus particularly on goal-oriented and experiential browsing orientations, as described by Wolfinbarger and Gilly (2001) in their study regarding the influence of shopping motivations on perceptions of online shopping.

In the context of online shopping, goal-oriented consumers have been found to be more likely to utilise the online retail due to the availability of information, large product catalogue and ease and speed of purchasing (Benjamin & Wigand, 1995; Wolfinbarger & Gilly, 2001). Yet it is increasingly recognised that the online environment can offer hedonic opportunities for the experientially motivated consumer (Childers et al., 2001). This study will build on such work, to understand better the needs and desires of those buying books online.

The Covid-19 pandemic has changed the shopping habits of consumers, forcing shoppers of all motivations into the online space and sparking debate regarding whether the trends of the pandemic will continue long-term (Sheth, 2020). This research will add to the theoretical trend of examining consumer perceptions of online retail in light of the COVID-19 pandemic. By examining the factors that contribute to facilitating hedonic browsing online, and evaluating whether tools that incite serendipity as part of the book-buying process may contribute to the enjoyment of the shopping experience, this study will add to the understanding of consumer perceptions of online book stores.

## **1.2 Buying books online: The Amazon problem**

Book retail combines both digital and physical businesses fluently, with over half of sales coming from online stores (Guren et al., 2021). Digital sales make up more than 10% of publishers total sales and are the main source of trade for self-published authors (Guren et al., 2021). Figures from 2019 suggested that Amazon controlled at least 50% of the US print book market, and as much as three-quarters of e-book sales (Evans, 2019). During the COVID-19 pandemic Amazon's net sales have rocketed, increasing by 37% compared with 2019 (Amazon.com, 2020). In contrast, census data from the US suggested that physical bookstore sales declined by 28.8% in October 2020 compared with 2019 (Guren et al., 2021). A similar trend exists in the UK, where retail sales in April 2021 were down by 22.2% compared with pre-pandemic levels (Office for National Statistics, 2021). These statistics highlight the growing importance of the online environment for book retailers, but also the possible adverse effects for smaller retailers who are being forced to compete with Amazon for sales in the online environment.

Commenting on the dominance of Amazon in the bookselling industry, Henry Mount summarised the issue: 'You can fit more books in an aircraft hangar but you cannot browse through them so enjoyably' (Mount, 2011). Amazon has been criticised for its adynamic browsing experience and its algorithmic recommendations that often leave little room for surprise—or serendipitous—discoveries (Worstall, 2013). This issue is particularly relevant in the context of book-retail, as empirical evidence suggests that serendipitous discoveries and long browsing times are aspects of the traditional book-browsing experience that consumers value. Laing and Royle (2013) found that 67 % of shoppers in bookshops spent around half an hour perusing the shelves, often culminating in a spontaneous purchase. The same research found that only 35% of online bookshop users visit websites just to browse (Laing & Royle, 2013). Building on findings by Laing and Royle (2013), this research will examine whether techniques to increase serendipity as part of the browsing process can stimulate a propensity to browse, and ultimately increase consumer enjoyment of online book-buying.

## **1.3 Societal relevance**

With uncertainty regarding the way that the pandemic will change global customer shopping habits in the long-term, it is vital that book retailers capitalise on the current popularity of online shopping to boost their sales and prepare for the possible continuation of

online retail popularity (Guren et al., 2021). In the UK, online retail reached record levels in January 2021 experiencing a 15.7% increase compared with January 2020, and recent research into small businesses showed that 73% identified development of digital infrastructure as a top priority (Goldman Sachs, 2020). If online shopping is to replace its physical counterpart, it is important that the hedonic aspects of the activity are also recognised in the digital environment (Childers et al., 2001; Kim and Eastin, 2011). With COVID-19 inviting retailers to reconsider their online presence and the structure of the book industry threatening the longevity of smaller retailers, research into how book retailers can improve their online presence is vital. This research aims to provide valuable information for book retailers who are looking to boost their online sales following the disruption of the COVID-19 pandemic.

#### **1.4 Theoretical relevance**

By approaching serendipity as an aspect of experiential intensity, rather than a method of information gathering, a gap in the extant literature surrounding serendipity in the digital environment will be addressed. In addition, differing shopper motivations and orientations will be kept in mind as control variables, to understand how consumers may perceive the shopping experience in varying ways. An international lens will be applied to this issue, recognising that different shopper groups may react differently to online environment. By determining what motivates consumers to shop, and what they appreciate about the online environment, the variables of enjoyment and serendipity will be evaluated to determine if there is any significant effect between them. In the context of book retail online, this is a new line of research.

#### **1.5 Research question and aims**

Using a mixture of quantitative and qualitative measures to understand the many dimensions of consumer perceptions, this study will primarily ask: to what extent is felt serendipity a contributing factor to consumer's enjoyment of the online book-buying process? Within this question, an understanding of which aspects (other than the possibility for serendipitous finds) of the online environment are most conducive to increasing experiential intensity will be sought. A thorough review of extant literature regarding the factors that influence enjoyment in the e-retailing environment will be conducted to evaluate the extent to which serendipity may contribute to increasing such positive effects. Furthermore, the concept of serendipity itself will be evaluated to understand how it is manifested and

appreciated by consumers. This research will contribute twofold to the topic of online book retail; it will address a gap in the extant literature which neglects the importance of serendipity to the online buyer of books, and it will offer recommendations to book sellers who are looking to better their retail sites to future-proof their business, compete with online retail giants and overcome the challenges of the COVID-19 pandemic.

## **2: Theoretical background and previous research**

To develop a clear understanding of the theoretical concepts relating to online shopping, consumer motivations and perceptions, and serendipity, a thorough literature review was undertaken. This section will review the research in these areas, to develop a theoretical framework that will underline the empirical research undertaken in this study.

### **2.1 Shopping motivations and orientations**

Shopping motivations and orientations affect the way in which consumers perform shopping tasks and can cause differences in shopping behaviour and perception (Lee & Kim, 2019). Furthermore, the orientation of the shopper can have an equally influential effect on consumer perceptions of the retail experience. The following section will define these terms using extant literature regarding retail perceptions.

#### *2.1.1 Motivations*

The extant literature has traditionally separated shopping motivations into two categories: hedonic and utilitarian. Hirschman and Holbrook (1982) define hedonic shopping as the fantasy and emotional experiences that can be developed from the purchasing of a product. Babin et al. (1994) further this assumption, suggesting that it is not only the draw of obtaining a product that produces emotional arousal, but the experience. Babin et al. (1994) determined that hedonically motivated shopping comprises of several dimensions including captivation, spontaneity and escapism. Yet they also theorised, drawing on previous research by Fischer and Arnold (1990), that hedonic and utilitarian shopping do not necessarily preclude each other (Babin et al., 1994, p. 647). There can be elements of ‘work and fun’ in the shopping experience, and hedonic value can also be drawn from a utilitarian motivated trip. This research will therefore recognise that hedonic and utilitarian motivations may intersect and can be simultaneously present in consumers.

Online shopping is often associated with utilitarian means, with Garcia and Donthu (1999) finding the online shopper to be convenience-oriented and variety-seeking, attracted by the large range of products available in an easily accessible format. Brown et al. (2003) added nuance to this theory, finding that those shopping online were motivated by a variety of factors besides from convenience, including price-comparison. Yet recent research has begun to recognise the existence of hedonically motivated consumers online (Davies, 1999; Doukidis et al., 2000; Vrechopoulos et al., 2004). Empirical evidence has shown that

management of online flow (Engeser, 2014), 3D visualisations (Kim et al., 2007) and interactivity (Gammack & Hodkinson, 2003) can affect consumer experience and provide hedonic opportunities. This research will add to this theoretical understanding in exploring the hedonic motivations of those shopping online for books, and the factors that may stimulate (or hinder) it.

### *2.1.2 Orientations*

A distinction is made in this study between shopping motivation (hedonic and utilitarian) and the wider concept of shopping orientation, which can be multifaceted in nature (Darden & Reynolds, 1971; Shim & Kotsiopoulos, 1993; Tauber, 1972). In the context of online shopping, studies have attempted to outline the orientations of the typical online shopper (Ganesh et al., 2010; Li et al., 1999), finding for the most part that online shoppers behave in fundamentally different ways (Donthu & Garcia, 1999; Rohm & Swaminathan, 2004; Swaminathan et al., 2006; Wolfinbarger & Gilly, 2001). To simplify the many shopper typologies that have been discussed in the extant literature, in the context of this study shopper orientations will be understood as the distinction between goal-oriented and experiential consumers, as defined by Wolfinbarger and Gilly (2001). Experiential behaviour is associated with collectors and hobbyists, in which the 'thrill of the hunt' is as important as the acquisition (p. 35). Goal-oriented consumers are described as task-oriented and efficient, choosing the online environment for its convenience and ease. 73% of surveyed online consumers were defined as goal-oriented in Wolfinbarger and Gilly's (2003) empirical study. Within this, four factors (website design, reliability, privacy and customer service) were found to contribute to consumer perceptions of the retail environment (p. 193). Different factors were found to affect the experientially-oriented consumer, including positive surprise and bargain hunting (Wolfinbarger & Gilly, 2001, p. 36). The extant literature therefore shows that the shopping orientation of consumers may affect the way they perceive online shops.

### *2.1.3 Relevance of shopper motivations and orientations*

Empirical evidence shows that shopping motivations and orientations have a significant effect on perceptions of the shopping experience, and the factors which influence enjoyment online (Wolfinbarger & Gilly, 2001). For example, hedonic shopping motivations have been proven to be instrumental in explaining shopping behaviour (Handa & Gupta, 2014; Swaminathan et al., 2006), and hedonic shoppers have been found to be more attuned

to atmospheric cues (Brown et al., 2003). Yet shoppers of all motivations and orientations have the potential to feel emotions of joy and satisfaction; whether that be from the very act of shopping itself or the ability to locate a product easily and conveniently. Motivations and orientations will therefore frame this study as control variables, with the understanding that hedonic and experiential shoppers are more likely to experience emotional experiences from the retail environment. Yet to allow for the examination of utilitarian and goal-oriented shoppers, this study will focus on a dimension of the shopping experience that can be derived from both hedonically and utilitarian motivated retail; enjoyment.

## **2.2 Dimensions of enjoyment**

Shopping enjoyment has been described by Kim and Kim (2008) as a ‘consumer’s personality trait that finds shopping more enjoyable’ (p. 411). Yet defining shopping enjoyment as a personality trait, a factor that cannot be accessed by utilitarian shoppers, dismisses the proven link between hedonic and utilitarian shopping experiences (Babin et al., 1994; Griffin et al., 2000; Picot-Coupey et al., 2021; Wang et al., 2007). Although factors such as pleasure and arousal are more closely correlated to the hedonically motivated shopper, utilitarian shoppers also experience these positive emotions (Babin et al., 1994; Picot-Coupey et al., 2021). It is therefore necessary to define what is meant by shopping enjoyment, and the factors that influence it. As this study focuses on online shops, both media enjoyment and retail enjoyment will be discussed.

### *2.2.1 Defining enjoyment: positive affect, fulfilment and engagement.*

Enjoyment has been thoroughly studied as part of various disciplines (see Lin et al., 2008, p. 41), often tantamount to emotions such as happiness, pleasure, and joy. Lin et al. (2008) argue that enjoyment contains several characteristics that synonymous emotions do not (p. 41), building on seminal work by Warner (1980). Warner (1980) developed three dimensions of enjoyment; positive affect, fulfilment and engagement, which reoccur often in the extant literature. White (1964) defines enjoyment as being ‘confined to what we ourselves are engaged in’ (p. 63). Seligman and Csikszentmihalyi (2000) take a positive affects perspective, describing enjoyment as the ‘good feelings people experience when they break through the limits of homeostasis’ (p. 12). Swinburne (1985) subscribes to the dimension of fulfilment as a definition of enjoyment, describing it as a ‘yielding to involuntary inclination’ (p. 435). Subsequently, although exact definitions in the literature differ, in accordance with

Lin et al. (2008) and Warner (1980), this study will define enjoyment as encompassing the three dimensions of positive affect, fulfilment and engagement.

### *2.2.2 Enjoyment online*

The aforementioned dimensions have been recognised in research into media enjoyment, which concurs that enjoyment can be defined as a pleasurable response (Bosshart & Macconi, 1998; Raney, 2003; Nabi & Krcmar, 2004 ;Vorderer et al., 2004), agreeing with the ‘positive affect’ dimension. Vorderer et al., (2004) describe enjoyment as the pleasurable response to media aesthetics, and Raney (2003) conceptualises enjoyment as the sense of pleasure derived from consuming media products. Yet Tamborini et al. (2010) criticise such research for neglecting the functional role that enjoyment has as a satisfaction of needs. The uses and gratification theory (Katz et al., 1974) (U&G) has been used to rectify such issues and a common attribute of research into media enjoyment (Tamborini et al., 2010). This line of study expresses enjoyment as a satisfaction of needs and has been proved relevant to the study of web browsing and online retail, with Eighmey and McCord (1998) finding that U&G could be used to explain user reactions to commercial websites. Enjoyment of online media has also been shown to be a dimension of engagement; Davis Mersey et al., (2010) developed a model of engagement using factor loading from empirical survey data, describing it as being split into social-interactive and personal engagement (p. 51). Intrinsic enjoyment was a factor of both. This concludes how positive affect, fulfilment and engagement are adaptable to the online media landscape.

### *2.2.3 Enjoyment of retail*

As the current study will focus on the online shopping experience as a form of media engagement, dimensions of enjoyment as part of retail must also be explored. The bulk of extant literature discusses shopping in brick-and-mortar stores, yet the development of digital retail has brought these theories online. As described, online shopping has historically been associated with utilitarian means (Benjamin & Wigand, 1995; Garcia & Donthu, 1999). Yet there is an increasing recognition that enjoyment can be an important factor in motivating consumers of all orientations and motivations to use the online space (Babin et al., 1994; Childers et al., 2001; Demangeot and Broderick, 2006; Picot-Coupey et al., 2021; Wang et al., 2007). Furthermore, when U&G theories are applied to online shopping, enjoyment can be understood to be derived from utilitarian motivations as well as hedonic objectives, as the fulfilment of certain needs can also create positive affects (Babin et al., 1994). This study will

recognise that enjoyment can be derived from shoppers with varying motivations and orientations.

The experience of interacting with computer systems has been a focus of extensive study that has largely focused on ‘task-related phenomena’ (Lin et al., 2008, p. 41) such as ease of use and user acceptance theories (see Davis, 1989). More recently, research has looked at how these practical approaches to web platforms can be extended to include enjoyment and hedonic motivations (Blythe and Wright, 2003; Van der Heijden, 2004). Yet the extant literature disagrees as to whether the factors that influence enjoyment online are the same stimuli as the factors that influence enjoyment in brick-and-mortar stores. Laing and Royle (2013) compared the experiential value of traditional shopping with the online process, stating that online shoppers tend to take a more focused approach to the purchasing process and appreciate the convenience of online search systems, whereas traditional shoppers put more emphasis on, and discover enjoyment through, the browsing process. Yet Demangeot and Broderick (2006) and Ganesh et al., (2010) found that shoppers relate to retail websites in terms of how similar they are to a ‘real life’ shopping atmospheres, suggesting that enjoyment dimensions in physical stores translate to the online retail space.

Further studies have found that hedonically oriented shoppers appreciate atmospheric stimuli online in a similar way to how they appreciate atmospheric cues instore (Brown et al. 2003; Handa & Gupta, 2014). Demangeot and Broderick (2006) developed dimensions of online experiential intensity from their study of online bookstores, with the participants in their study citing four dimensions of the shopping experience as key to their enjoyment; context familiarity, product presence, visual impact and site-user understanding. These dimensions draw on theories regarding the impact of website atmospherics (see section 2.4) which have been shown to have a significant effect on consumer enjoyment, browsing, loyalty and purchasing patterns (Daily, 2004; Eroglu et al., 2001). Such studies confirm that enjoyment is an important factor of the online shopping process, and this research will add to this debate by summarising the perceptions of those shopping online for books.

#### *2.2.4 Social benefits of increasing enjoyment*

The stimulation of enjoyment is not only valuable for consumers. Research has shown that consumer enjoyment can be a valuable tool for retailers in stimulating their business (Kim et al., 2007). As defined by Reeve (1989), ‘enjoyment contributes to intrinsic motivation by sustaining the willingness to continue and persist in the activity’ (p. 83). In the

context of shopping, whether online or offline, this ‘willingness to continue’ can be defined as browsing time. Kim and Eastin’s (2011) study of hedonic tendencies in the online consumer found links between browsing time and buying frequency in online stores. Childers et al., (2001) agree that when consumers enjoy the shopping experience, they are more likely to browse for longer, make impulse purchases and develop consumer loyalty. Enjoyment has also been emphasised as an important factor in drawing new and/or reluctant customers to online retail spaces (Goldsmith & Goldsmith, 2002). A range of literature also supports the correlation between hedonic motives and impulse purchases (see Gultekin & Ozler, 2012, p. 181), which are often linked to longer browsing times. The following section will focus on browsing patterns of the online shopper, before moving on to discuss how serendipity, amongst other factors, may contribute to the enjoyment of the retail experience.

## **2.3 Browsing**

Browsing is a common feature of the shopping process and has been linked to the enjoyment of shopping (Babin et al., 1994; Cox et al., 2005; Wakefield & Baker, 1998; Kim & Kim, 2008), and claimed to preclude serendipitous finds (Foster & Ford, 2003). Kim and Kim (2008) found that customers who had an intrinsic enjoyment of shopping were more likely to engage in extended browsing and felt restricted by time constraints. The act of browsing has also been evaluated as a motive, with Bloch et al. (1989) describing the shopping process not only as buying a product, but as a combination of information gathering, buying and pleasure. More recent research from Moe (2003) developed four strategies of the shopper, one of which was ‘hedonic browsing’ (p. 30); partaking in browsing as part of an information-gathering process with no clear motivations other than pleasure-seeking. The general link between browsing and enjoyment has therefore been confirmed (Benhamza Nsairi, 2012). This study will determine whether the potential for serendipity may increase the enjoyment, and motivation to engage in, such hedonic browsing activities.

### *2.3.1 Browsing motivations in the physical and digital space*

Browsing itself has been thoroughly investigated in varying contexts, including libraries (Willard & Teece, 1983), digital information catalogues (McKay et al., 2019), instore shopping (Bloch et al., 1989) and online shopping (Chen et al., 2019). Willard and Teece (1983) described browsing as encompassing two main categories; general browsing and specific browsing. If a visitor was seeking items within a specific subject area, or by a certain author, they were said to be engaging in specific browsing. Non-specific browsing

was described as the seeking of items in no particular subject area and by no particular author. Of those interviewed, 48.2% reported they had come to the library only to browse (general browsing) with 18.1% visiting to find a specific book or certain information (specific browsing). These results are significant, as they emphasise the necessity for research into the browsing patterns of those who are not researchers but browse for books with no goal in mind.

Despite recommendations from researchers such as Willard and Teece (1983), a significant portion of the extant literature has been devoted to helping improve the research process for scientists and academics, rather than from the perspective of those browsing and purchasing books for pleasure (Case, 1991; Cooksey, 2004; Hoeflich, 2007; Makri & Blandford, 2012). The rise of digitalised catalogues brought fears that the serendipitous value of physical browsing could be lost, therefore studies have emphasised the importance of chance-inducing factors such as the role of librarians (see Cooksey, 2004, p. 29). Books are clearly useful products for their informative value to the researcher, yet such research neglects the fact that books—notably fiction books—are hedonic products, as their consumption leads to a form of emotional arousal (Clement et al., 2007). This research will attempt to address this gap by using theories of browsing to examine how the potential for serendipitous finds may increase the experiential value of buying books online.

Browsing as part of the online shopping experience is a relatively new avenue of research. Moe (2003) examined whether the same browsing motivations that can be evaluated in physical shoppers present themselves in a similar way online, finding that the ‘hedonic browsers’ were more likely to spend time on general (category) pages rather than specific product pages (Moe, 2003, p. 35). The study also discovered that hedonic browsers viewed a greater variety of pages, suggesting that they were seeking new stimuli, or possibly an unexpected find (Moe, 2003, p. 35). This agrees with studies regarding online shopper motivations which has found them to be innovative and variety-seeking (Donthu & Garcia, 1999). Moe’s (2003) research was expanded upon by Park et al. (2012) who proposed that online shoppers should be split into hedonic and utilitarian browsers. Yet Nsairi (2012) theorised that, in the same way as shopping can extend beyond the hedonic/utilitarian typologies, ‘browsing experience goes beyond utilitarian-hedonic value and provides other experiential benefits and gratifications’ (p. 679). Therefore, the theories of orientations and motivations that underpin this study are clearly relevant to the process of online browsing.

This study will attempt to underline whether serendipity as part of this browsing process may encourage greater enjoyment as part of the online book-buying experience.

### *2.3.2 Flow Theory*

Research into the enjoyment of the online browsing process has often been associated with flow theory (Hoffman & Novak, 1996). Flow has been described as the optimal state of web browsing, in which the challenges and the skill of the user are balanced as they engage in information searching activities online (Mathwick & Rigdon, 2004, p. 325). Flow theories interact with ideas of playful exploration, to create positive experiential outcomes from the online browsing process (Mathwick & Rigdon, 2004). Those who browse online for recreation are often described as being in a state of ‘flow’ when they are highly engaged in their search, and the result is a state of mind which can be gratifying for the consumer (Novak et al. 2000, p. 22). Yet flow theory states that if the skill of the searcher exceeds the challenges of the search (or vice versa), the experience becomes negative (Hoffman & Novak, 1996). Although there have been no studies into flow theory as part of the online book-browsing process, this theory may enlighten the current study by offering a possible explanation for the positive or negative experiences of consumers online.

Browsing motivations are clearly multifaceted in nature, and there may be multiple reasons behind why the browsing process is deemed enjoyable. The current research will therefore treat this concept on a case-by-case basis and avoid making assumptions regarding participant’s browsing experience. Yet it can be presumed that, given Moe’s (2003) findings that hedonic browsers seek out unexpected finds, the results of this study will show that those who shop for fun, pleasure and emotional stimulation will be positively affected by the increased possibility for serendipitous discoveries. This study will also add to the literature regarding browsing motivations in examining whether the more utilitarian and goal-oriented consumer may also benefit from the increased potential for serendipity as part of the book-buying process.

## **2.4 Atmospherics and user experience**

Intrinsically connected to the browsing process are theories regarding store atmospherics, which have traditionally been one of the most prevalent explanations of enjoyment both online and instore (Dailey, 1999; Kotler, 1974; Michon et al., 2005). The term atmospherics was coined by Kotler (1974), who defined it as ‘the conscious designing

of space to create certain buyer effects' (p. 50). Since then, the effect of atmospheric stimuli on instore shoppers such as music (Morin et al., 2007) and scent (Michon et al., 2005) have been studied. Since the beginning of the 21<sup>st</sup> century, there has been a wave of research into how atmospheric cues may also affect the online consumer (see Vrechopoulos, 2010, p. 520). Studies have shown that web atmospherics can have a positive effect on consumer perceptions (Eroglu et al., 2003; Liu et al., 2008; Manganari et al., 2009; Zviran et al., 2006). Furthermore, recent research by Bruschi et al. (2019) suggests that web atmospherics could play a role in convincing customers away from the 'Goliaths' of online retail and towards smaller, niche online sellers. This is particularly relevant for the study of online bookstores, dominated as it is by large e-tailers like Amazon (Guren et al., 2021). The extant literature separates the study of atmospherics online into three categories: informativeness, effectiveness and entertainment (see Sai Vijay et al., 2019, p. 4). As this study will focus on increasing enjoyment as part of the online book-buying experience, studies that evaluate how atmospheric cues can affect enjoyment will be evaluated here.

#### *2.4.1 Atmospherics and enjoyment online*

Lin et al. (2008) developed and validated a scale to investigate the nature of the enjoyment experienced by web users in order to offer explanations for web-users attitudes and behaviours. They found that websites that were designed to facilitate user engagement, sensation and reaction were more likely to report enjoyable online experiences (Lin et al., 2008). Floh and Madlberger's (2013) research into impulse buying online concluded that when shoppers positively perceive web portal's design and navigability, their enjoyment of the platform increases (Floh and Madlberger's 2013, p. 434). Navigability is a variable of particular interest to the current study, as it directly relates to the ways in which consumers can browse through the store. Empirical research by Daily (2004) found that restricted navigational atmospherics can cause negative attitudes towards websites, whereas increased user control was positively correlated with positive user experience. Studies by Pallis et al., (2007) and Yen (2007) took a closer look at how navigational cues can improve the web-browsing experience, advocating the clustering of consumers and the application of accessibility-popularity frameworks to target the ways that individual consumers prefer to browse. Given the differing shopping and browsing motivations outlined previously, the current study may contribute to these works by underlining the browsing preferences of book consumers shopping online. In terms of design, Tractinsky and Lowengart (2007) argued that the aesthetics of an e-store can influence the perceptions of consumers, and Fiore and Jin

(2003) found that for the online sale of apparel, image interactivity (the ability to manipulate product images) had a positive effect on retailer perceptions.

The extant literature shows that both navigation and design can be manipulated to increase positive affects for users of online web shops. Consumers have been shown to perceive design attributes of web shops differently depending on the type of product they seek (Zhang et al., 2001), therefore this research will attempt to underline how design attributes, namely those that increase or decrease the possibility for serendipitous finds, impact the consumers browsing for books online.

#### *2.4.2 Atmospherics and book-buying*

The particularities of the book-browsing process must be considered. Soars (2009) discovered that sensory tools such as touch, sight and smell are powerful marketing tools that can heavily influence the experience of the consumer. Liang and Royle (2012) brought this research into the context of book-buying, finding that 89% of their respondents described the tactile quality of the shopping experience as something they missed online (p. 122). This supports research that has found that if a consumer appreciates the sensory experience of shopping, they are less likely to purchase products online (Citrin et al., 2003; Peck & Childers, 2003). Citrin et al. (2003), following their survey into the importance of tactility in retail, suggest that ‘if the product being marketed is highly experiential, the consumer must be given some opportunity to experience the product’ (p.921). Online, this could translate as virtual reality graphics that can be manipulated by the consumer in a similar way to how consumers interact with products instore (Salisbury, 1999).

The current research will add to these findings by examining how book-buyers interact with online book shops, and whether their enjoyment of the process can be increased by increasing the presence serendipity, a factor of the traditional shopping experience that has been proven to be of value to the consumer (Liang & Royle, 2013). The following section will define serendipity and orientate it in the context of online book-buying.

### **2.5 Properties and models of serendipity**

The concept of serendipity has been thoroughly studied, yet extant literature disagrees on a concrete theoretical understanding of this phenomenon. Studies differ regarding what exactly constitutes serendipity, and whether it can be stimulated by external forces or must be summoned from within the person who experiences it. A simple definition by Beale (2007)

describes serendipity as the ‘making of fortunate discoveries’ (p. 421). Other research that has focused on serendipity as part of data-mining exercises have taken a similar stance on the definition of serendipity (e.g. Foster & Ford, 2003; Hoeflich, 2007; Van Andel, 1994), describing serendipity as the lucky discovery of something that turns out to be useful in some way. Yet other studies differ in their definitions of serendipitous acts; Liang (2012) shows how serendipity can be understood beyond simply a tool for facilitating usability, instead looking at serendipity as an enjoyable aspect of everyday life. Reizenzein et al., 2019 explain how serendipity can be valuable in and of itself because when an unexpected act occurs, an attribution is sought, and if no logical attribution is made then the pleasurable feeling of luck is created. These studies highlight how serendipity can be valuable not only for the resultant find, but for the pleasurable feeling that one has experienced luck.

Understanding serendipity as an enjoyable aspect of lived experience is vital, as serendipity will not be evaluated in this study for its utility to the researcher but as part of recreational shopping activities. Serendipity in the marketplace occurs when the consumption or purchasing of a product induces the positive feelings of surprise and fortune described above (Kim et al. 2021). These feelings may result in positive emotions toward the product or the retailer (Kim et al. 2021). In the context of this study, serendipity will be understood by combining the interpretations of the data-mining and the lived-experience perspectives, in order to evaluate the possible benefits that serendipity may have on both the process of searching for books, and the experience of online browsing.

### *2.5.1 Creating serendipity*

In addition to the difficulty in defining what the value of serendipity is, academic literature differs regarding how it is created. Van Andel’s (1994) study of computer technologies determined that serendipity cannot be stimulated alone by a machine, but rather from the combination of the delivery of diverse information and the desire to find a valuable outcome brought by the human researcher. Cooksey (2004) furthered this finding in placing the theory of serendipity in the context of online libraries, describing it as a phenomenon that can only be created through a convergence of ‘mind and conditions’ (p. 25). That is, serendipity cannot be created solely by a platform, but occurs when a searching mind finds value from an unexpected source, facilitated by an organised platform (Cooksey, 2004). Liang (2012)—who describes serendipity as the act of creating ‘meaningful unexpectedness’ from experiences—differs from Cooksey (2004) and Van Adel (1994) by claiming that serendipity can be created by technology, providing it is treated as a material catalyst for

serendipitous experiences. Understanding whether serendipity is caused by external factors, or whether it is a phenomenon stimulated internally, is an important issue, as if serendipity is purely created by the insight and sagacity of the searcher, then efforts to create serendipity-inducing platforms appear futile.

To extrapolate what serendipity is and how it is created, several studies created models of the phenomenon. McCay-Peet and Toms' (2010) study described serendipity as four-stage process: the searcher begins looking for a solution to a certain task and framed by 'precipitating conditions' they come across a serendipity 'trigger' that causes them to connect two pieces of previously unrelated information. Ultimately, an unexpected solution is gained (see Makri & Blandford, 2012a, p. 685). The immediacy of the feeling of serendipity that is described in McCay-Peet and Tom's model is countered in other attempts to describe this phenomenon. Rubin et al. (2011) suggest that serendipity occurs from the combination of the act of noticing a perceptual cue in the environment, and an element that seems out of the searcher's control. When these two events occur then a fortuitous outcome is perceived. Crucially, however, Rubin at al. (2011) state that serendipity itself is only recognised after the discovery as part of a reframing of events. This model agrees with Cunha's (2010) description of serendipity, defining it as 'the accidental discovery of something that, post hoc, turns out to be valuable' (p. 320).

A similar model by Lawley and Tompkins (2008) discusses serendipity as an iterative process in which the event is realised to be serendipitous as its outcome proves itself, over time, to be valuable. Lawley and Tompkins (2008) find that serendipity can only take place if the person who experiences the event has a prepared mind, ready to recognise the potential it may have. Makri and Blandford (2012a) used Lawley and Tompkins' model to create their own 'recipe' for a serendipitous act, which included the ingredients of a prepared mind, an unexpected event, the recognition of potential and the ultimate amplifying of this value that results in a post-hoc appreciation of the event as serendipitous.

For this research, these models of serendipity will be valuable in examining if research participants have experienced serendipity. Although models differ on the exact definition of the value of serendipitous discoveries, they concur that serendipity is created from a list of vital 'ingredients': an event that is unexpected, a prepared mind looking for fortuitous occurrences, and a degree of felt value.

### *2.5.2 Serendipity and shopping*

Although none of the above models were created to describe serendipity that occurs in a retail environment, prior research from Kim et al. (2021) suggests that these models of serendipity translate to the retail context. They found that feelings of serendipity associated with recommendations gave a greater sense of satisfaction than when customers choose their own purchase. Such research not only justifies the examination of the link between serendipity and enjoyment in the online book-buying process, but also confirms that serendipitous acts in a retail environment are valued in a way that concurs with the discussed serendipity models.

Furthermore, the essential ingredient of the prepared mind can also be found in those who engage in shopping activities. The ‘precipitating conditions’ described by McCay-Peet and Toms (2010) can be likened to the impact of shopping motivation (hedonic or utilitarian) and differing browsing aims (general or specific). These motivations may influence how open consumers are to serendipity. Yet as previously described, the shopping process is also heavily influenced by atmospherics, or external cues that can change the perceptions of browsers. These external cues will be considered ‘triggers’, as described by McCay-Peet and Toms (2010), that may be serendipity inducing or not. Grange et al. (2019) found evidence that serendipity can be stimulated by manipulating atmospherics in the online retail environment, and that as a result shopper satisfaction and engagement can be increased. Their experimental survey used two websites; one of which was manipulated to include social recommendation systems, designed to increase the serendipitous find. The other used standard filtering search techniques. As well as discovering that serendipity can increase engagement and satisfaction, Grange et al. (2019) found evidence that motivations effect the chance of serendipitous discoveries. Furthermore, participants who were more focused in their search reported more serendipitous discoveries (Grange et al., p. 232), agreeing with the serendipity models that suggests both motivations and external cues can contribute to the creation of serendipity. The suitability of serendipity models for describing chance encounters in an online retail space has therefore been underlined. Yet it is also important to explore the relevance of serendipity in the process of book-browsing.

### *2.5.3 Serendipity in the stacks*

In the context of libraries, the importance of librarians in facilitating serendipitous finds has been underlined (Cooksey, 2004; Makri & Blandford, 2012). Yet such studies have

focused on the importance of facilitating serendipity to improve the research process, rather than from the perspective of those procuring books for pleasure. As this research will focus on serendipity as an enjoyable aspect of lived experience (Leong et. al, 2010), theories regarding how surprise discoveries are appreciated by the casual shopper must be evaluated. As discussed, the experiential value of serendipity to the shopper has been illustrated in the marketplace (Kim et al., 2021), who found empirical data to suggest that in a marketplace that encourages serendipity, consumers are more likely to record a positive experience, recommend the marketplace to others and purchase from them again. This study was conducted in a range of different outlets, but online book-buying was not included. The role of serendipity in the context of online book-buying has been examined in part by Liang and Royle (2013), whose interviews with book consumers looking at their consumption patterns found that serendipity is a valued part of the brick-and-mortar book-browsing process, but is recognised to a lesser extent online. Their empirical evidence however did find grounds to suggest that serendipity may be valued by consumers online, and therefore online platforms should begin to ‘rival the serendipity of browsing in traditional bookshops’ (Liang & Royle, 2013, p. 124). This research will build upon this recommendation, and incorporate findings from general marketplace research by Kim et al. (2021) to examine whether serendipity can increase enjoyment in the online book-buying environment.

#### *2.5.4 Defining serendipity*

Following this review of extant literature, serendipity will be understood as the feeling that an event has been unexpectedly valuable. This feeling may occur immediately, but it is more likely to be developed after the event itself took place, and once the true value of the event has been revealed (Rubin et al., 2011) It will also be recognised that the motivations of shoppers themselves can contribute significantly to the potential for felt serendipity, due to the effect that the ‘prepared mind’ can have. Crucially, serendipity will be understood as an aspect of lived experience, rather than as a tool to facilitate useful finds. The ‘value’ that is a dimension of serendipity itself will therefore be understood not purely as the value of the object (in the context of this study, the book) but also as the joy of the discover, the feeling of being ‘lucky’ and the excitement that accompanies the unexpected find.

### **2.6 Increasing serendipity in online book-browsing – Addressing the research gap**

As discussed, most literature involving serendipity and book-browsing has focused on facilitating random finds for researchers. From a review of the extant literature, it does not

appear that the role of serendipity in the online book-buying process has been studied. Yet aspects from studies of how serendipity affects user perceptions of other online databases and retail platforms can shed light on possible ways that serendipity in online bookstores can be increased, and the effects that this increase may have.

Kim et al. (2017) discuss serendipity in online bookstores in the context of curated recommendation systems. These systems are different from common recommendation systems which work on an algorithmic basis, showing customers products they may like based on their past purchases or interests. Amazon uses such a system, using a ‘neighbourhood of related items’ that can be shown to the consumer whenever they buy or look at a product through ‘You viewed’ or ‘Frequently bought together’ sections (Kim et al., 2017, p. 615). Kim et al.’s (2017) study demonstrates how these algorithms are prone to failure because they lack a ‘human touch’ (p. 616). This finding is reiterated in other studies which found users to be more accepting of human recommendors, as they are better placed to understand the nuances of consumer likes and dislikes (Fowler, 2014; Hennig-Thurau et al., 2012). Furthermore, by recommending products that consumers are expected to like, algorithms decrease the chance that consumers are shown unexpectedly valuable products, therefore decreasing the chance of serendipitous finds (Kim et al., 2017).

Algorithms are also characterised by the cold start problem; information must be entered by the consumer before the recommendation system is able to propose potentially products. This poses an issue for non-specific browsers (Willard & Teece, 1983), and stands as a major drawback of the online space for consumers who are experientially motivated (Kim et al., 2017). Curated recommendation systems can overcome the issues of algorithmic recommendation systems by utilising community-building tools and enabling personal touch to more accurately recommend products based on users likes and dislikes (Kim et al., 2017).

Kim et al. (2017) determine that curated recommendation systems can increase the possibility of serendipitous finds by providing consumers with recommendations that are sufficiently different from their past purchases, whilst retaining a subtle link to their interests. Therefore, this research invites the opportunity to evaluate whether this increased serendipity can stimulate enjoyment as part of the online book-buying process. As those browsing for books for hedonic purposes have been shown to be largely non-specific browsers (Willard and Teece, 1983; Worstall, 2013)—and to regularly find value in books they were not expecting to come across (Liang & Royle, 2012)—it is likely that the issues of recommendation systems outlined by Kim et al. (2017) will be relevant to the online book-

buyer. This study will build on this research whilst addressing the literature gap regarding the impact of recommendations systems in online bookstores.

Given the significant impact of web atmospherics on those browsing for books, a further point of interest in terms of increasing serendipity online is the creation of graphics designed to incite serendipity. Although the extant literature does not appear to have covered the impact that graphics may have on those buying books online, a paper by Thudt et al. (2012) has looked at the role of atmospherics in the context of online library catalogues. Thudt et al. (2012) developed the *Bohemian Bookshelf*, an online tool designed to support serendipitous book discoveries through information visualisation. The concept of the tool is explained by the authors:

‘With the Bohemian Bookshelf, our intention was to create a digital parallel to the open ended “browsing the shelves” experience that has been shown to encourage serendipitous discoveries’ (p.1)

With these issues in mind, Thudt et al. (2012) developed their *Bohemian Bookshelf* using visualisation techniques to design towards serendipity. They outlined five serendipity-inducing aspects of the physical book-browsing experience that may be lost in the digital space; multiple visual access points, highlighting adjacencies, enticing curiosity, flexible visual pathways and playful exploration. They also highlight that knowledge, open-mindedness and perseverance act as catalysts to potentially serendipitous finds. To move the serendipity inducing abilities of the physical library into the online space, the *Bohemian Bookshelf* utilises graphical tools such as Book Pile visualisations (to address the desire of browsers for a tactile experience) and Keyword Chains (to address the desire for targeted recommendations). When tested, the tool created a ‘considerable excitement of visitors toward visualizations of library collections that facilitate open-ended exploration and serendipitous discoveries’ (p. 9).

As well as supporting the link between enjoyment and serendipity, *The Bohemian Bookshelf* invites further research into how online atmospherics can be used by marketers to increase enjoyment in the browsing process by creating serendipity inducing tools. This research will therefore address this gap, evaluating whether similar graphical visualisations can increase serendipity as part of the online book-buying process.

### **3: Research Methodology**

My research attempts to create a better understanding of the importance of serendipity in the digital environment, and how it contributes to the experiential intensity of online shopping. This requires an understanding of the relationship between two distinct variables: serendipity and enjoyment. Quantitative research, which aims to quantify the relationships between variables, is therefore a suitable method to evaluate the extent to which serendipity is an important aspect of the enjoyment of online browsing (Brennen, 2017). Yet my research aims to go further than providing a link between the variables of serendipity and experiential intensity of the online environment, to provide concrete advice for bookstores wishing to improve the experiential intensity of their ecommerce businesses. Hedonic experience is a theoretical concept that is derived from the meaning-making process of individuals. Therefore, to fully understand this aspect of my research, qualitative methods are most appropriate (Brennen, 2017). A mixed-method approach, in which quantitative research will facilitate further analyses with qualitative methods, will therefore be utilised.

The decision to implement a mixed-method approach to evaluate whether there is a connection between serendipity and enjoyment as part of the online book-buying process was confirmed by an examination of similar studies. Demangeot and Broderick (2006), whose study looks at the experiential intensity of online shopping experiences, concluding after an extensive review of past research that ‘a study of the experiential intensity of retail web sites...needs to be sensitive to the particular expectations of shoppers’ (p. 334). In-depth interviews were chosen to get to the crux of consumer expectations and intentions, pairing this empirical evidence with an experiment to obtain data regarding how consumers experience the online environment. Another similar study by Lowry et al. (2005) used an experimental method to gather data of how shoppers enjoyed the browsing experience and interacted with products. For similar reasons to Demangeot and Broderick (2006), they chose to strengthen this experimental design with follow-up interviews to better assess the perceptions of the shoppers. Both papers show evidence of the importance of qualitative methods to understand fully the motivations and perceptions of shoppers. Yet they also underline the importance of gaining data, in both cases from experimental designs, to build a theory that can then be evaluated using qualitative methods. Experimental methods were therefore the first choice for the current research, but due to restrictions caused by the Covid-19 pandemic this was unfortunately not an option. Quantitative methods will therefore attempt to give the basis on which a theory of shopper perceptions of the online book-browsing process will be built.

The use of mixed methods has been controversial, largely due to the historic ‘paradigm wars’ (Lincoln & Guba, 1985) that have raged between qualitative and quantitative methods. Yet more recently it is becoming accepted that both methods can be complementary to each other (see Flick, 2007, p. 92). Hammersley (1996, p. 167-168) developed three forms of linking qualitative and quantitative research; triangulation (stresses mutual validations or results), facilitation (where one method informs the basis of the second) and complementary (the equal combination of both methods). This study will employ the facilitation approach, with the quantitative stage laying the foundations to be built upon with qualitative research (explained in more detail below). Such combinations have been shown to improve the quality of research, providing there is an adequate integration of both designs (Flick, 2007, p. 106). The quality of the qualitative methods in this study will therefore be supported through quantitative methods, to build a base for the creation of theories regarding how shoppers perceive the online book-buying environment.

A mixed method sequential explanatory approach to data collection will be implemented in the empirical part of this study, consisting of two phases: a quantitative questionnaire and qualitative in-depth interviews (Creswell & Clark, 2010; Steckler et al., 1992). The second phase will build on and explain the results of the first phase, and then the final stage will connect and interpret both approaches (Creswell & Clark, 2010). Using Bryman’s (2006) typologies of reasons for employing mixed methods, my research is justified in using this approach as qualitative methods can add context to relationships uncovered with quantitative research. Furthermore, it is hoped that the qualitative method will explain any quantitative relationship found between serendipitous browsing and the hedonic enjoyment of the online shopping experience (Bryman, 2006).

### **3.1 Survey**

As discussed, quantitative methods were chosen to analyse the relationship between the two variables of enjoyment and serendipity as part of the online book-buying process. Surveys were chosen as the most suitable method of gaining a large response rate in a short amount of time, as were preferred due to their low cost and limited barriers to participation (Fricker, 2017). The target population for the research is anyone who had used an online store to browse for or purchase a book. Due to the size of this population, it was clearly not possible to create a census, therefore the distribution of the survey was aimed at reaching a sample of the population. Furthermore, the population in question is ill-defined (it is difficult to determine the current number of people who bought a book online within the past year),

therefore true randomisation using probability sampling would be impossible (Etikan et al., 2016).

Non-probability, unrestricted self-selection was chosen as the sampling method, as each participant was left to decide for themselves whether to take part in the research or not when they were exposed to it. This method was deemed acceptable for use as the purpose of the survey was not to support statistical inference regarding the target population, but rather to develop theories regarding the ways in which shoppers appreciate the online book-buying process (Fricker, 2017). Therefore, despite quality concerns regarding convenience sampling (see Farrokhi & Mahmoudi-Hamidabad, 2012), this method was used to explore possible connections between serendipity and enjoyment as part of the online browsing process, which will then be elaborated upon through qualitative means.

A mixture of snowball and convenience sampling was used in distributing the survey online. The sampling frame was determined by the choice of platforms the survey was posted on. Only those members of the population active on these platforms, and part of the closed groups that were primarily used to collect respondents, were free to participate. This excluded a large proportion of the population, and as previous studies by Alvarez et al., (2003) and Schonlau et al., (2004) suggest, will likely create a significant bias in the subsequent respondents. Yet as previously stated, generalisation of the target population was not an aim of this survey, therefore risking a biased sample was not considered as an issue to research quality.

The survey was posted in a variety of different community groups online, but primarily on Facebook. The groups targeted were discussion groups regarding matters related to books and publishing. The survey was also distributed on Twitter by a popular vlogger who posts book reviews on her YouTube channel, and promoted by those who had come across it who shared it with their connections. These methods of snowball and convenience sampling aimed to reach a large selection of the target audience whilst focusing on those who were already avid book-readers and keen to engage in debate surrounding books and publishing. By focusing the distribution on these channels it was hoped that respondent would be people who are familiar with the book-buying process who would respond thoughtfully. The survey was open for 10 days, after which it was closed and removed from circulation (see Appendix B for survey contents).

In total, 179 responses were recorded, of which 19 were unfinished. As the sampling methods used make it impossible to say how many people saw the survey, calculating response/non-response rates is not possible. The survey was removed from circulation once the target number of respondents set out in the thesis proposal (minimum 100) was succeeded sufficiently, allowing a margin to account for the possible errors, outliers and incomplete responses found during the data cleaning process.

After data cleaning which removed responses containing a significant number of missing responses,  $N = 118$  were used for further analysis. All these respondents confirmed that they had visited an online bookstore at least within the last year, with 50.8% ( $N=60$ ) having shopped within the last week and 27.1% ( $N=32$ ) visiting an online bookstore within the previous 1-3 weeks. The survey reached a total of 25 countries, with the greatest number of responses coming from the Netherlands (24.6%), followed by USA (23.7%) and the UK (15.3%). Participants recorded the bookstore they last visited, with 34 online stores being mentioned. Amazon was the most frequently named, with 47 (39.8%) respondents having used the website for the last time they browsed for a book, followed by 12 (10.2%) mentions for both Bol.com and Book Depository.

### **3.2 Measurements**

The two concepts of interest in the survey are perceived serendipity of the online shopping experience, and enjoyment of the shopping experience. To measure these concepts, verified scales from previous studies were used. All questions for these variables were measured on a 5-point Likert scale (1 = disagree to 5 = agree).

#### *3.2.1 Serendipity*

Serendipity in the online environment was measured by combining two scales (Cronbachs  $\alpha = .88$ ). This decision was made based on the literature review that found serendipity is commonly described as being made up of two factors: unexpectedness and value (see Grange et al., 2019, p. 226). The items were chosen from scales that had been used in studies that closely relate to this research. Given the changing nature of the digital environment, it was also beneficial that the chosen scales had been verified in relatively recent studies.

*Serendipitous value.* The presence of serendipity-derived value was measured using a scale modified from Grange et al.'s (2019) study which looked at serendipity as a desirable

factor in the online shopping experience. Three items were selected to measure this concept (Cronbach's  $\alpha = .84$ )

*Unexpectedness.* Unexpectedness was measured using a three-item scale adapted from McCay Peet et al.'s (2015) verified 15-item scale measuring serendipity in the online environment. The items chosen made up the factor that measured unexpectedness, and were adapted to suit the context of online book shopping (Cronbach's  $\alpha = .82$ )

### 3.2.2 *Enjoyment*

An extensive review of the literature surrounding enjoyment as part of the hedonic shopping process revealed three dimensions (see Lin, 2008, p. 43), which were measured using three four-item scales; engagement (Cronbach's  $\alpha = .85$ ), positive affect (Cronbach's  $\alpha = .92$ ) and fulfilment (Cronbach's  $\alpha = .72$ ) To broaden this definition and measure the 'intrinsic enjoyment' (López et al., 2016, p. 126) of the online shopping experience, a further factor was created using four items taken from Babin et al.'s (1994) scale of hedonic shopping value (Cronbach's  $\alpha = .77$ ). The result was a 16-item scale (Cronbach's  $\alpha = .90$ ).

### 3.2.3 *Control variables*

As described, motivations can affect the perceived utility of the online shopping environment (Saarinen & Vakkari, 2013; Wolfenbarger & Gilly, 2001; Zhai et al., 2016), which may in turn influence enjoyment and the perception of serendipity. Therefore, it was important to understand participant' motivations for shopping online. This was measured using a multiple-choice question that drew on work by Willard and Teece (1983), who identified three motivations for browsing: general browsing, general purposive browsing, and specific browsing. These findings were used to create three multiple choice options regarding participant's motivations for visiting an online bookstore.

A further control variable based on the participant's aptitude for online shopping was created to account for the participant's comfort in using online stores, as seen in previous studies which analyse the difference in propensity to shop online or in store (Cao, 2012; Zhai et al., 2016). Based on this prior research the participants were asked to self-assess their comfort in using online stores, to control for any affect this any have on their enjoyment of the e-shopping process.

Finally, to control for those participants who may score highly for enjoyment purely because they are fanatics who buy books regularly as part of their hobby, the frequency of book purchasing will be recorded. Those with a very high book-buying frequency will be considered ‘book fans’ and this will be controlled for in the testing of the relationship between enjoyment and serendipity.

### **3.3 Interviews**

The qualitative strand of this research will be semi-structured interviews, performed with a random selection of participants who took part in the quantitative phase and left their email address indicating they would like to be considered for further research. The interview process was designed using Rabionet’s (2011) 6 stages of determining the correct type of interview to use: (a) selecting the type of interview; (b) establishing ethical guidelines, (c) crafting the interview protocol; (d) conducting and recording the interview; (e) analysing and summarising and (f) reporting the findings. The first three, relating to the preparation of the empirical research, will be discussed here.

#### *3.3.1 Determining interview type*

This research aims to determine the extent to which a correlation exists between the variables of serendipity and the experiential intensity of the online book-buying experience. Therefore, qualitative research must be focused enough to gain clear understanding of participant’s views and feelings regarding their past experiences in this regard. Structured interviews—which ‘encourage a limited range of response and are open to a minimum of interpretation’ (Brennen, 2017)—were considered too rigid for this research, as the lived experiences of participants are likely to be highly individual and should be evaluated as such. Yet the sequential explanatory approach of the research design requires that the result of the quantitative strand of the research are built on and explained using qualitative methods (Creswell & Clark, 2010; Steckler et al., 1992). Therefore, it is imperative that the results of the initial survey are included in the design of the interview process, and that each respondent is given a chance to express their own views on the results found. Semi-structured interviews offer enough control for the researcher to ensure that the findings of the quantitative strand are evaluated thoroughly, allowing for comparison and maintaining the quality of the data (Young, 2018; Kvale, 2007). Yet they will also allow flexibility for the interviewer to delve deeper into the individuality of the lived experiences of participants (Brennen, 2017; Kvale, 2007; Rabionet, 2011)

### *3.3.2 Thematising of theoretical concepts and developing protocol*

The second stage, ‘evaluating the ethical implications’, will be discussed subsequently alongside the ethical concerns from the quantitative study. This leads to the third stage, ‘crafting the interview protocol’ (Rabionet, 2011, p. 564). The interviews were thematized using the results of the survey, in combination with theoretical expectations discovered during a review of the extant literature. Although objectivity is arguably impossible in social research (Babbie, 2021), the theoretical orientation of this paper was developed without prior expectations and therefore aimed to reduce the impact of researcher bias. Furthermore, results from the quantitative strand of research, even if they did not fit with the extant literature, were noted and carried through to the qualitative research.

The core theoretical concepts of the study were then translated into interview questions which were posed to the respondents to understand their personal experiences and perceptions of using online bookstores. The interview guide was structured around six general themes (see Appendix A):

1. Motivations for buying books (what type, how frequently, how important this is to participant’s lives)
2. Feelings on the difference between online and instore purchasing (including the participant’s self-assessed expertise in using online stores)
3. Enjoyment of the (general) shopping experience
4. Experiences shopping for books online and offline
5. Possibility for serendipitous discoveries
6. Perceived value of serendipitous discoveries

These themes were created from the results of the quantitative strand of research, which shall be expanded upon in the results section of this paper. A brief outline of the results will be explained here to describe how the interview guide was thematised.

The quantitative results highlighted that there did indeed appear to be a link between serendipitous discoveries and enjoyment of the shopping process. Therefore, the interview guide was designed to evaluate this finding, building upon findings from the literature review which suggested a correlation between the two variables (Kim et al., 2017; Thudt et al., 2012). Furthermore, this correlation appeared to be strengthened depending on the motivations of the participants to shop (hedonic/utilitarian). Therefore, the theme of

‘shopping motivation’ was created to evaluate case-by-case how each participant viewed the shopping experience in general, and what their goals are when they begin their browsing. In addition to this, the importance of books to the participants was examined by asking for figures regarding how many books they read a year, and by evaluating how passionately they spoke about this passion.

A possible control variable for the enjoyment of the online browsing experience was the degree to which participants were used to an online environment and if they found such websites easy to navigate (Pallis et al., 2007; Yen, 2007). Although results from the quantitative survey do not show a significant difference in enjoyment when experts online is controlled for, this is an area of interest that will be evaluated further.

A clear result from the survey was that enjoyment of the online book-buying process was relatively low (see results sections for details). The theme of enjoyment will therefore be analysed through a comparison of the instore book-buying experience and its online counterpart. This will build on finding by Liang and Royle (2013) to get a clear picture of whether increasing serendipity could be a factor in why participants displayed a decreased enjoyment of online shopping environments.

The average score for perceived serendipity reported by the survey was relatively low (see results sections for details), therefore the theme of missing serendipity will be explored in the interviews. Due to the abstract nature of this concept and known difficulties in getting participants to pinpoint how and when they experience serendipity (McCay-Peet & Toms, 2015), this theme will be approached by asking participants to describe their browsing experience (first instore, and then online), and instances of unexpectedness as part of this process will be noted. The value of these unexpected finds will be queried, with a particular emphasised on how the value of serendipitous finds may change if they are experienced instore or online.

The interview protocol was therefore determined by a consideration of both the theoretical findings from extant literature and the results of the survey. This method attempted to limit the role of researcher bias, as the theoretical orientation of the interview was influenced not by the personal biases of the researcher, but by the findings from empirical research.

### *3.3.3 Visual prompts*

Informed by findings from the Bohemian Bookshelf (Thudt et al. 2012), the role of visuals was deemed to be a point of interest. Unfortunately, obtaining working visuals of the Bohemian Bookshelf itself was not possible, therefore a similar tool was sought to get the reaction of participants. The Google Infinite Bookshelf, a tool created by Chrome in 2011, is a visualisation of a bookshelf that can be interacted with in a way that attempts to replicate the instore browsing process (Google, 2011). Described by the makers, the tool is designed to create ‘something that looks like the shelves in your living room, but is also capable of showcasing the huge number of titles available online’ (Google, 2011). It allows users to select a section of interest (e.g. bestsellers or genre) and scroll through lists of books displayed on a helix-shaped bookcase. When a title catches their eye, it can be ‘lifted’ off the shelf with a click and opened to reveal a synopsis and information regarding where the book can be bought. The role of aesthetics and visual informatics in the enjoyment of online shopping is of interest to this study, therefore the participants will be shown a demo of this tool (through screen-sharing) to evaluate their reaction to it (see Appendix A).

### **3.4 Ethical considerations**

For the quantitative aspect of this study, care was taken to aim for validity in the sampling procedure, yet with the understanding that the recruitment methodology would produce a certain bias; allowing participants to self-select whether they take part in the survey although an ethical choice, may produce samples that differ depending on recruitment choices (Fielding et al., 2017). The possible implications of this sampling strategy will be discussed during the conclusions of this paper (see section 5.2).

In terms of privacy, informed consent was obtained by a brief description of the aims of the survey prior to participation. Respondents were required to agree that they had read and understood the aims of the research, and to confirm their willingness for their answers to be used before continuing. Those who left their email addresses to be contacted for further research did so under the understanding that this information would be deleted once they had been contacted to ensure their personal data was protected.

For the in-depth interviews, participants’ informed consent was obtained. The signed document included a full briefing regarding the aims and design of the interview process. The decision to include a full briefing was made to reduce the possibility of ethical concerns

regarding participant deception (Kvale, 2008). Furthermore, the interviews followed a ‘data-mining’ procedure in which the ‘objective facts’ of the participant’s experiences regarding browsing online for books were unearthed (Kvale, 2008, p. 19). This focus on the empirical knowledge of each participant means that they are unlikely to be ‘led’ by understanding the aims of the research prior to the interview.

The participants were invited to take part in the research with an email that explained the goal of the study (to evaluate their experiences shopping for books online and how they enjoy this process), but the key word ‘serendipity’ was left out of this description. This was due to the abstract nature of the word that may not be clear to some respondents and could act as a deterrent to taking part in the research. Instead, the description mentioned the importance of ‘unexpected finds’ as part of the book-browsing process. Participants were informed at several stages of the process, including at the beginning of the interview, that they had the right to stop the process at any point, for any reason. This insured their participation was entirely voluntary (Babbie, 2021).

As described by Babbie (2021), two further ethical concerns in social research are anonymity and confidentiality. Anonymity, defined by Babbie (2021, p.65), can only be achieved when neither the researcher nor the readers of the research can identify which respondents gave which responses. Total anonymity therefore could not be achieved given the personal nature of the chosen methods (interviews), yet confidentiality was treated with utmost importance. Participants went unnamed in the study (with pseudonyms being used to identify respondents), and all personal data collected from the participants (email addresses, names, demographic information) were deleted on the completion of the research. Participants were informed of this and agreed to provide demographic information with the understanding that their details would not be shared.

All the above measures attempted to ensure a valid, ethical and safe-guarded study for all involved. The following section will describe the results that were obtained from both qualitative and quantitative methods.

## 4: Results

### 4.1 Quantitative analysis

As described in the methodological section of this paper, a survey was distributed online to analyse the relationship between the two variables of serendipity and enjoyment, along with other dimensions such as shopping frequency, comfort using online retail technology and motivation to shop tested as control variables.

A total of 179 responses were recorded over a period of fourteen days in which the survey was circulated online. After data cleaning removed partial responses and significant outliers,  $N = 118$  were used for further analysis, meaning that 34% were discarded. Although this is a significant number, as the survey was only the first stage in a larger, mixed method study, the results were deemed to be acceptable to determine some basic relationships between the tested variables.

#### 4.1.1 Serendipity and Enjoyment – Pearson's Correlation

The survey was operationalised using two main variables measured on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). Enjoyment was measured using a 16-item scale (Cronbach's  $\alpha = .90$ ) consisting of four factors: fulfilment (Cronbach's  $\alpha = .72$ ), engagement (Cronbach's  $\alpha = .85$ ), positive affect (Cronbach's  $\alpha = .92$ ) and intrinsic enjoyment (Cronbach's  $\alpha = .77$ ). Serendipity was measured on a six-item scale consisting of two factors: serendipitous value (Cronbach's  $\alpha = .84$ ) and unexpectedness (Cronbach's  $\alpha = .82$ ).

Total enjoyment was found to be relatively low ( $M = 2.07$ ,  $SD = .65$ ), as was the average score for serendipity ( $M = 2.41$ ,  $SD = 1.02$ ). These variables were then submitted to a correlation analysis to determine whether a relationship could be determined between them, once tests of normality and linearity confirmed that the assumptions of Pearson's correlation were met. The result showed a weak-to-moderate correlation between the two variables, with  $r(116) = .32$  ( $p = <.001$ ).

#### 4.1.2 Subgroup analyses

Several exploratory subgroup analyses were performed to gain an understanding of the factors that may be contributing to the variables of interest that will be carried through to the qualitative section of the current study.

##### *Subgroup 1: Motivation to shop.*

The survey found that 72.9% ( $N = 86$ ) of respondents were motivated to shop because they had a specific book in mind, with 17.8% ( $N = 21$ ) having a general purpose but no specific goal, and only 9.3% ( $N = 11$ ) going online just to browse. These results support the conclusion that people tend to shop online when they have a specific goal (Benjamin & Wigand, 1995; Wolfenbarger & Gilly, 2001). An exploratory correlation analysis (see Table 4.1, Appendix C) showed that for those who did not have a motivation when browsing (motivation group 1), the relationship between serendipity and enjoyment was slightly higher, although this was based on a very low subgroup sample and the results are therefore not statistically significant ( $r = (8), .51 (p = .110)$ ). However, when those who did have specific goal in mind were examined (motivation groups 2 and 3 combined) ( $N = 86$ ), the correlation coefficient between serendipity and enjoyment decreased to a weak association,  $r = (84), .26 (p = .013)$  with the value being significant to the .05 level (see Table 4.2, Appendix C). This result will be examined further during qualitative analysis.

##### *Subgroup 2: Comfort using retail technology.*

Participants were asked to self-assess their comfort in using online sites to shop on a sliding scale of 1-10. There were several missing results for this question due to a technical issue with the survey, however a total of 97 participants recorded an answer for this question showing a relatively high level of comfort online ( $M = 8.4845, SD = 1.69$ ). A subgroup correlation analysis was performed to examine whether there was a link between participants comfort using online retail and enjoyment. Those who reported being less comfortable using online retail ( $\leq 5$ ) had an average enjoyment of  $M = 2.33$ , slightly higher than the total average. Those who reported themselves to be more experienced ( $\geq 5$ ) had a mean enjoyment of  $M = 2.08$ . This is an unexpected result that could be developed during qualitative analysis. There was no notable difference between the correlations scores for serendipity and enjoyment when participants were split into the subgroups of more comfortable online and less comfortable online.

### *Subgroup 3: Shopping frequency.*

To examine whether the extent to which consumers were ‘fanatical’ shoppers had an impact on the relationship between serendipity and enjoyment as part of the online book-buying process, the frequency of their book purchasing was examined using a multiple-choice question from 1 (I buy books once a week) to 5 (I rarely ever shop for books). When an exploratory subgroup correlation analysis was performed for those who stated they bought books every week ( $N = 66$ ) there was an increase in the correlation coefficient to a moderate level, ( $r = .46$ ,  $p < .001$ ). This suggests that those who buy more books appreciate the chance for serendipity as part of the book-buying experience more than those who browse for books less often. This connection will be analysed further during the qualitative stage of the current study.

#### *4.1.3 Summary of survey findings*

The results of the survey show that there does appear to be a correlation between the two variables of serendipity and enjoyment. However, this relationship is relatively weak and does not translate into a causation, meaning the link between the two variables is still unknown. Exploratory subgroup analyses reveal several interesting, significant variations in the correlation coefficient when different groups were isolated based on control variables answers. Comfort using technology does not appear to influence the correlation between serendipity and enjoyment, although being less comfortable online surprisingly did increase reported levels of enjoyment. When motivation to shop online was targeted (participants went online to buy a specific book) the relationship between serendipity and enjoyment produced a lower correlation coefficient ( $r = .26$ ) than the total group, and this result was significant. Furthermore, shopping frequency affected the relationship between serendipity and enjoyment, with those who shopped once a week for books reporting a larger correlation coefficient ( $r = .46$ ) than the total group.

The results of the survey, although tentative, seem to show agreement with many aspects of the theory regarding serendipity and enjoyment as part of the online shopping process. These results will be examined further in the next stage of the research, to understand what causes the weak correlation between serendipity and enjoyment, and whether this correlation can be deemed to be a causative link.

## 4.2 Qualitative analysis

A total of eight interviews were conducted with participants who had taken part in the survey section of this study and who had expressed interest in being interviewed by leaving their email address. A total of 22 participants left their contact details, of which a random sample of 10 were contacted. Eight agreed to an interview, which was held over Zoom. The participants were from 7 different countries: New-Zealand, America, Portugal, Czech-republic, the UK, The Netherlands and Malaysia. Six females and two males were interviewed, with the mean age group being 16-30, with three participants being older than this age group (45-60). All considered themselves to be avid readers and book fanatics, although the amount they read in a year varied significantly from over 100 books to around ten. The interview began (after initial ice-breaking regarding their book-reading habits) with a discussion of their general shopping behaviours, through which the respondents were characterised as being either hedonically motivated or utilitarian shoppers. Four reported that they shopped often for pleasure, whilst six stated they usually shopped only when it was necessary. The interviews ranged in length from 35 minutes to 55 minutes, but the same interview guide was used for each. The following table gives an overview of the participants:

**Table 4.1** *Pseudonyms of interview participants with demographic information.*

Pseudonym	Age group	No. of books read per year	Shopping motivation	Country
Jane	16-30	80	Hedonic	The Netherlands
Mary	16-30	100+	Hedonic	Malaysia
Liam	16-30	50	Utilitarian	New Zealand
Mike	30-45	10	Utilitarian	Czech-Republic
Joss	16-30	40	Utilitarian	Portugal
Elsa	16-30	100+	Utilitarian	America
Anne	45-60	30	Hedonic	UK
Audrey	45-60	80	Hedonic	UK

Interviews were transcribed and analysed using thematic analysis, in which codes were assigned to each relevant section of the transcribed text. From this initial coding, themes

were created that related to the two variables of interest; serendipity and enjoyment. The following section lays out those results by first discussing the dimensions of serendipity that were found, and then the dimensions of enjoyment. As the results show, there was a significant cross-over between these two dimensions, suggesting an intrinsic link between serendipity and enjoyment that goes beyond the suggested correlation found in the quantitative results.

### **4.3 Serendipity dimensions in online shoppers for books**

The following section will draw an overview of the dimensions that were found to contribute to the experience of serendipity online. Serendipity was identified during the coding process using the definition that was determined following the literature review. Experiences were coded as being serendipitous if they referred to an unexpectedly valuable event, that is appreciated not only for the book that is found but also the feeling associated with the surprise discovery. The feeling of serendipity was recognised if it was described as an immediate reaction to an event, but also if it was only recognised on reflection. Attention was put on the cues that lead to the serendipitous find, as well as the precipitating conditions (e.g. the motivations of the shopper) preceding the serendipitous event. Coding revealed four different aspects of the online shopping process which were involved in the serendipitous finds mentioned by the respondents; product range and variation, recommendation systems, browsing patterns and shopper motivations.

#### *4.3.1 Range and variation*

A significant factor that precipitated instances of serendipity described by the respondents was the range and variation available in online stores. This was particularly relevant for those respondents who liked to read in English, but lived in a country where English translations of books were more difficult to find instore. They would 'browse' online to search for books that they had not heard of because they had not been translated into their native language, or were not yet successes in their country. This finding builds on research by Donthu and Garcia (1999), who found internet shoppers to be innovative and variety seeking. Evidence from participants suggests that online shoppers for books are not only looking for something new and varied, but also something surprising. This was particularly notable in respondents who were extremely involved in the world of books, spent a lot of time researching new releases and were experts in their preferred genres. After describing an

instance when she found a valuable discovery online, one respondent emphasised the importance of range and variation to her:

Mary: 'I usually get quite excited if I see a title I haven't seen before. Because that tends to happen less and less as you become, you know, like, more acquainted with books...And yeah, it's quite rare to be surprised nowadays.'

This thought was echoed by other respondents who were equally absorbed in the world of books. These respondents reported having more patience to browse through catalogues online, as it was part of their hobby of keeping up with new releases and trying to stay on top of the increasing range of books available. They therefore found more unexpected books and experienced more serendipitous moments online.

For those who reported themselves to be less avid readers, the range of books online was often seen as counterproductive for finding new books:

Mike: '[o]n a website, it's a little bit harder, you know, to see everything they have, because they tend to have a lot more online than in the store. So sometimes you don't even stumble across anything new.'

This variation in participant responses to the value of the increased range and variation of books available online could be explained by the 'prepared mind' theory emphasised by studies into serendipitous dimensions (McCay-Peet & Toms, 2010; Grange et al., 2019). In other words, if a shopper goes online specifically looking to be surprised by a new book discovery, serendipity is more likely to be felt.

Furthermore, the propensity to browse for respondents varied significantly, based on several factors including their shopping motivation (hedonic or utilitarian) and their goal in visiting the site (specific or general). Those who were not motivated either by a specific search purpose, or who took less pleasure in the shopping process, experienced the value of increased range online differently, as the following quote shows:

Joss: 'I sometimes I will go through genres on, for example, Amazon, but I get tired. Like, I go like to page four. And I'm like, What am I doing? I'm not seeing anything that's interesting.'

The quantity of books online seems to be a deterrent for some shoppers, who find it limits their ability to find something new because they are deterred from browsing due to the time it would take. As a result, these shoppers experience less instances of serendipity as they do not partake in the serendipitous browsing that usually precedes the unexpected find. Shopper motivations played a key role in determining whether respondents found unexpected value online. If shoppers were willing to browse the digital shelves, then serendipity could occur. Yet for others, the quantity of books acted as a deterrent to serendipitous browsing and therefore the serendipitous find.

#### *4.3.2 Recommendations*

For those who found the online space overwhelming in its range and variation, there was a common expression that a curated range of books could act as a motivator for them to browse online, and often proceeded a serendipitous find. Serendipity was reported as occurring due to online recommendation functions which record past purchases and views to present customers with books they may be interested in. Finding unexpected finds through recommendation algorithms brought with it a sense of enjoyment for many, even those who reported disliking the online shopping process in general:

Audrey: ‘I think maybe one of the things I like about online stuff is when you do start buying things online, they start suggesting, oh, you might like...’

Similar patterns of finding unexpected books were described by other respondents, yet the serendipitous finds were made only after either a purchase, or an initial specific search for a particular book was made:

Jane: ‘...sometimes I do have a book in mind and then you click on it and Amazon is of course very smart with its algorithm and they will come with people who bought this also enjoy this and sometimes I will take a look at it to have some titles, like, Oh, what is that, what is that, and I have found books through that way as well.’

This method of online browsing agrees with the ‘cold start’ theory as explained by Kim et al., (2017); recommendations can only be made by an algorithm once a search has been entered by the customer, which leads to most online browsing being initially goal-oriented. When respondents were asked in they browsed online, the typical response was as such:

Audrey: ‘Only if I’ve already started...so I’ve gone on to it looking for something I know, and then when there’s another recommendation.’

Others expressed concerns that the recommendations they receive via these algorithms do not match their tastes, and in fact can decrease their chances of finding unexpected products. This significantly reduced the enjoyment they experience when browsing for books online and caused frustration for some:

Elsa: ‘It’s like, just bestsellers. And then here’s the next book in the series. I swear. That’s, that’s all it’s capable of doing. And I was like can you just, I don’t know, put some random books in there some things I’ve never heard of?’

As well as showing a clear desire for more serendipitous opportunities as part of the online browsing process, this comment agrees with the concerns raised by Kim et al. (2017) regarding the inadequacy of recommendations systems based on algorithms, which lack the ‘human touch’ necessary to stimulate the serendipitous find. The variety seeking online shopper may be frustrated by the lack of variation algorithms afford, therefore confirming the link between online enjoyment (when enjoyment is characterised as the fulfilment afforded by the experience) and serendipitous possibilities.

These results therefore agree with the recommendation of Kim et al. (2017) that there is space in the online retail market for more curated recommendation systems that reflect the wishes of the individual shopper. The enjoyment of such recommendation systems substantiates the link between serendipity and enjoyment online, as the main benefit of these algorithms was their ability to lead respondents to valuable books that they would otherwise not have selected.

#### *4.3.3 Browsing*

As discussed, the browsing patterns described by respondents were characterised by goal-oriented searching that led to the browsing of related products through website algorithms. This form of browsing often elicited serendipitous finds, and was described as a highly engaging activity akin to going down a ‘rabbit hole’ of recommendations, as the following participant describes:

Elsa: ‘I guess just go to the genre, and then just kind of start clicking through the pages, if something catches my eye on that I read it, like the little description it’s got. I mean, if it

doesn't sound interesting, just go back. Keep browsing through pages of stuff. If it does sound interesting, maybe take a note of it somewhere.

This description resonates with the flow theories of online browsing engagement, and indeed the responses of many participants suggest that their browsing could occasionally enter a state of flow in which they are both challenged and engaged in their search for something valuable. This process was reported to, pleurably, result in the unexpected:

Elsa: 'Generally, you end up deviating really hard on wherever you started. You just go with the flow.'

Not all participants engaged in online browsing, with approximately half stating that they did not browse online. Crucially, the majority reported their online browsing sessions to be significantly shorter than their instore browsing sessions. Participant's reluctance to browse for extended periods online was explained as being due to a variety of reasons, including a dislike of spending too much time online, difficulty in browsing such a vast range (as discussed) and a general lack of engagement with the online experience, as the following participant describes:

Jane: 'I'm never like oh, I'm just going on Amazon right now, not it's not the same. So just not the experience. It's more usually because I need it and sometimes my curiosity will make me click further and browse further but it's not really like because I'm planning a fun afternoon, I will go on Amazon for an hour.'

This backs up the findings by Liang and Royle (2013), that the experiential intensity of the online space still lacks considerably behind that of traditional stores. The lack of experiential intensity is shown here to be directly linked with shorter browsing periods, and a propensity to engage in goal-oriented searches rather than browsing activity. Yet the role of recommendations in stimulating browsing (as discussed above) is evidence that there is a desire, and a possible avenue, for more browsing activity to be encouraged online, which would in turn increase online browsing times and potentially buying frequency (Kim and Eastin, 2011).

Browsing for books online was found to proceed serendipitous finds in the context of this research, and this serendipitous browsing was a process enjoyed and valued by many respondents. However, it was rarely the intended goal of the online visit, but rather developed after an initial, goal-oriented search took place. Respondents therefore seem to value the

potential for serendipity only as a secondary aim after their primary goal-oriented online shopping has been achieved.

#### *4.3.4 Shopping orientation and motivation*

A final dimension described within participants' experiences of serendipity in online book-buying was their shopping motivation and orientation. Respondents who showed their use of the online environment to be goal-oriented and utilitarian described very few examples of serendipity, and did not seem to appreciate the phenomenon, as the following example shows:

Joss: 'I usually already have the books I want to buy in mind. Sometimes I may come across something that I think, oh, I recognize this book from somewhere and I will check it out. But usually, I already have in mind what I want to buy.'

Other respondents who described their book-buying habits as being goal-oriented expressed a similar indifference to the ability of retail websites to show them something unexpected, and tended to emphasise the importance of accurate search systems as an important tool to maximise their fulfilment on these sites, and often could not report an instance in which they happened across something unexpected online, as the following comment shows:

Anne: 'I cannot think of a time that I've come across a book, if I'm browsing through an online shop, and bought it, if I'm honest'.

Using the language of McCay-Peet and Toms (2010), the motivations to shop and perceptions of the online environment create the 'precipitating conditions' that appear to reduce chances for serendipity amongst goal-oriented and utilitarian-minded participants. On the other hand, respondents who reported more hedonic motivations and the propensity for general browsing described more instances of serendipity online and appreciated the phenomenon more, as they were 'looking to be surprised' (Mia) online. One respondent, who admitted to browsing online sites for hours per day, reported their unexpected finds to be as frequent:

Interviewer: 'How often do you come across something unexpected on these sites?'

Mia: 'That would be every day, I would say'.

The results suggest that shopping motivation and orientation are significant factors in the frequency that serendipity is experienced online. Those who look to be surprised online and have the motivation to browse through the large selection of products, can experience serendipity and express an appreciation of the phenomenon. Yet most participants (5 out of 8) expressed the general mentality that the online space is suited for goal-oriented motives, and therefore expressed an indifference to the potential for unexpectedness.

## 4.4 Enjoyment dimensions for online shoppers for books

### 4.4.1 *Ease, convenience and range*

The extensive range of books that can be found online was reported by respondents to be a factor in the enjoyment of the online book-buying experience, as well as a possible catalyst to serendipitous discoveries. This combine with the convenience and ease of online shopping, in which customers could browse a wide range with ease, and conveniently find the book they were looking for. All respondents except one described themselves as reading a great variety of books from varying authors and genres. As a result, they greatly appreciated shopping environments that could show them a large range that included books that were less widely known, as the following respondent describes:

Elsa: '[i]t is kind of fun to just have like the random mystery...seeing all kinds of different stuff'.

This was a sentiment echoed by many respondents, who rarely based their purchases on the best seller lists or critically acclaimed novels, instead preferring lesser-known book choices. The online space can benefit the consumer through the capacity to hold a greater range of books, as research from Brynjolfsson et al., (2003) has shown. Yet the results of the interviews suggested that this increased range does not always translate into an increased enjoyment. The range available in online shops (although mentioned frequently and clearly valued by participants) was described with language which emphasised convenience over enjoyment. Compare the following descriptions, the first discussing a physical store, the second an online store:

Jane: 'It's like so big and it has a massive English section. And it's like two floors high. There's so much and it's just so nice.'

Jane: '[t]hey have a giant assortment. Like they have everything that you can imagine. So... and the price it's usually cheap, cheaper than, yeah, stores. So, it's just easy and convenient.'

The range of books provided online does is described as valuable for the convenience that it offers the consumer, rather than the hedonic browsing opportunities it offers. Although fulfilment is understood in this study as a factor of enjoyment, and therefore conveniently obtaining a particular book could be deemed to be an enjoyable activity, the word choice used by many participations suggested this fulfilment was not enjoyable in nature:

Anne: 'I'll just feel okay. Yeah, I've done it, you know, ticked a box kind of thing. I've sorted that.'

This further confirms research by Laing & Royle (2013) that book consumers look online for convenience, and instore for experiential intensity. There was evidence from two respondents that the range available online could offer more hedonic opportunities. These two respondents described themselves as 'collectors' of books, and therefore the search for obscure, particular products was part of this hobby.

The results show that enjoyment can be stimulated by the range of books available in an online store, yet this depends on the personal habits of consumers and is much more pronounced instore than online. In the online space, range appears to serve largely to increase the convenience of goal-oriented shopping online.

Although the online environment was largely described in terms that emphasised its convenience for the user, rather than in terms of its experiential intensity, this convenience and ease did on occasion suggest a dimension of enjoyment. As stated during the theoretical discussion, enjoyment is understood in the context of this study as a multi-dimensional feeling compiled of engagement, fulfilment and positive affect (Lin, 2008, p. 43), these aspects were used to inform the coding. Fulfilment was often mentioned as part of the online shopping experience, particularly in relation to the ease and convenience of finding products from the comfort of the consumer's own home, ordering them with ease and having them quickly delivered. Those interviewed who claimed to enjoy online shopping tended to state factors relating to convenience and ease as the key to this positive affect:

Joss: 'I like that I don't have to get out of my house. Because it's more practical.'

This was a view echoed by another participant, who preferred the online environment as it enabled her to compare and search through a vast number of products without getting tired:

Mary: '[y]ou get tired. So I feel like I need to go home...I feel that online shopping is a lot more convenient. Because I can just kind of pause that shopping experience and come back later.'

The discussion of ease and convenience also brings up the role of navigability, which was found during the literature review to be a contributing factor to consumer's enjoyment of

the online space (Daily, 2004; Palis et al., 2007; Yen, 2007). None of the respondents expressed any difficulties in using online stores to purchase products, suggesting that in general, online bookstores are well designed to facilitate easy and convenient purchases. (All participants were recruited through an online survey and all stated that they were relatively experienced in shopping online, which may influence this finding.) Navigational factors in terms of search functions were often mentioned as being an influential factor in consumer loyalty to a certain site. On explaining why Thrift Books was her favourite online bookstore, one participant said:

Elsa: 'I think it's just an easier to navigate interface.'

Navigational factors were shown to impact participant's propensity to avoid certain websites that were more difficult to navigate, as another participant shows:

Mary: 'the ones [bookstores] that have better websites, of course, are the ones that we gravitate towards.'

Such responses suggest that, for the most part, the convenience and ease of use of a website, including its navigational ease, are key factors in the enjoyment of the online process, and maybe more crucially, in consumer's propensity to return. This finding confirmed information sourced from the extant literature surrounding the effect of navigational cues online (Pallis et al., 2007; Yen, 2007). There was one participant, however, who continued to use the website of his local bookstore (which was forced to close due to the pandemic) despite it being 'glitchy'. This suggests that consumer loyalty, at least in the short term, could be a stronger drawing factor to online sites than navigational ease.

Ease and convenience were factors in the enjoyment of the online environment, yet once more this was largely due to the orientation of consumers to go online with a clear goal in mind. If this was the case, they appreciated navigational tools that made it easy for them to access the book they had in mind. Yet those who preferred the experience of shopping without a goal in mind tended to appreciate the convenience only as a necessary substitute to instore shopping. In terms of hedonic activity, there were no instances in which participants described a website whose navigational factors created a more enjoyable, hedonic browsing experience. One possible reason for this is summaries by a participant:

Audrey: ‘that is the way I kind of engage with Amazon, I don't go on to browse like that as such. I go on to find a particular book or a novel so, and so the search engines allow me to go straight to that.’

Once more, the attitude of participants to the online environment appears to prevent browsing actions that could lead to more serendipitous and/or more enjoyable online encounters.

#### *4.4.2 Recommendations*

Another significant aspect of the online browsing experience was the role of recommendations. As well as increasing the likelihood of serendipitous finds, evidence from participants suggests it was also a factor in online shopping enjoyment. General recommendations were a clear aspect of the overall enjoyment of being part of the ‘book community’ for all participants. Two respondents were members of book clubs, and the remainder mentioned using Goodreads to check peer reviews of books. Two participants mentioned that Goodreads has a significant role in their decision to choose a book, both online and offline, as they will often check the reviews of an unknown book to ensure it is not extremely low.

Although not the aim of this study, this research did pick up some interesting findings regarding the use of critical reviews in the way consumers choose books, noting that they favour peer reviews (on Goodreads, YouTube or word of mouth) to reviews by professional critics. These findings agree with research by Clement et al. (2007) which showed that word of mouth has a greater influence on book success than positive critical opinion.

Online recommendations in the form of algorithmic suggestions were shown to positively influence shopping engagement, which is understood in the context of this study as a dimension of enjoyment. When asked to recount experiences of online shopping experiences that they enjoyed, many participants mentioned instances in which they were able to find books through recommendation systems based on their previous purchases or searches. Although many participants said that they were most engaged in these recommendations after they have bought a product, one participant explained how even without a purchase, she can be drawn in by online recommendations:

Mary: ‘[Y]ou don't even have to buy [a book] before they're recommending stuff to us. I think that's really good.’

There were some notable exceptions to this enjoyment of algorithmic recommendations. Three participants recalled the ‘just terrible’ recommendation systems on Amazon, which were reported to show participants the same books over and over:

Elsa: ‘[I]t's [Amazon] just terrible, I swear, it like shows you the same books for like eight months in a row. And it gives you fascinating recommendations that I don't know where it's coming up with.’

The participants then stated this as a reason why their visits to Amazon were purely goal-oriented and not to browse:

Elsa: ‘[Y]ou're going to Amazon with a mission.’

These views agree with common conceptions that Amazon is a website that does not allow for the serendipitous find (Mount, 2011; Worstall, 2013).

The results of the eight interviews suggest that recommendation systems can help to increase both enjoyment and serendipity as part of the online book-buying process. When they fail, it is interesting that both engagement with the online space and the possibility for serendipitous discoveries seem to be negatively affected. This suggests that the relationship between serendipity and enjoyment that was discovered during the quantitative phase of research may be influenced by such systems, as they encourage consumers to stay online and continue browsing even after a purchase has been made. This leads to another dimension of enjoyment in the online environment, browsing.

#### *4.4.3 Browsing*

As the quantitative results of the current study found that 72.9% of consumers went online with a specific book in mind, whether consumers engage in online browsing was a point of interest during the interviews, especially as browsing has been shown to be both a factor of shopping enjoyment and a predecessor to serendipity. The results of the interviews showed that browsing is indeed an essential part of the book-buying process instore, furthering research by Kim and Eastin (2011) which showed browsing time to be linked to purchasing decisions. Participants were occasionally motivated to browse online, and this browsing was a key factor in their enjoyment of the online book-buying process. The online browsing was, however, characterised by the ‘cold start’ issue; most respondents claimed they would only browse online after an initial purchase was made. It is this attitude to online

shopping that was reported as preventing hedonic browsing from taking place, as one participant explains:

Jane: '[Y]ou know, sometimes I'm just not really in the mood for it. I just want that book. And I don't really feel like searching for other things. Because, like, it's not like I need books'.

Although several participants mentioned instances in which they experienced enjoyment from the online book-browsing process, only one suggested that they regularly go online purposefully to browse for books. This participant was arguably the most 'fanatic' of the eight interviewed (reading over 100 books per year), and was the only participant who consistently evaluated the success of her shopping trips in terms of whether she was able to buy a product:

Mary: 'the part of the shopping that I like the most is the buying part [laughs].'

For this participant, browsing online was a key aspect in her enjoyment of the platform. Significantly, she was also the only participant who reported experiencing serendipity more online than instore.

Browsing was found to be a factor in the enjoyment on online book-buying, but was described as a factor that many were reluctant to partake in. This was largely due to the attitude towards the online environment, which was seen by most as a place in which goal-oriented purchases could be made, but was not a space for hedonic activity. When the shoppers who were interviewed did browse online, they found the process fulfilling and engaging, yet this did not seem to motivate them to partake in it more often. Instead, the majority tended to browse only when they were 'hooked' by algorithmic recommendations in the period after they had made an initial purchase. Significantly, this is also the period in which most instances of online serendipity were described.

#### *4.4.4 Shopping orientation and motivation*

The orientations and motivations of shoppers were found to significantly influence how they evaluated their shopping experience. For those participants who evaluated the success of instore shopping trips in terms of the experiential intensity it afforded (hedonic shoppers), the online environment was in general viewed negatively (with the notable exception of one participant, as discussed). For those who evaluated the success of shopping

trips in terms of what they purchased and if they were able to find specific products (utilitarian shoppers), the online environment afforded them a greater sense of enjoyment (largely through fulfilment). Just as the 'prepared mind' allows for more serendipitous discoveries, attitudes to shopping appear to dictate the enjoyment experienced online.

For consumers searching for experiential intensity, making the online experience more interactive and like the instore experience could persuade them that the online space is also a fitting environment for their hedonic motivations. Furthermore, these consumers may be, as indicated by Demangeot and Broderick (2006), experiencing the online environment in terms of how it is lacking in comparison to the instore environment. Participants often compared the two environments, saying that the online shopping experience was 'just not the same' or 'online shopping just doesn't compare'. Such shoppers may then be interested in visuals and web atmospherics that attempt to replicate the instore browsing process online, to meet their experiential expectations of the shopping process. This leads us onto the discussion of visuals.

#### *4.4.5 Reaction to Google Infinite Bookcase – The role of atmospherics*

To evaluate the role of web atmospherics, participants were shown the Google Infinite Bookshelf tool and invited to give their opinions on how it could change their browsing experience. Initial reactions focused on the aesthetics of the tool, with language such as 'looks nice' and 'looks fun' used. There was a distinct difference in reactions of those who were determined to be hedonic shoppers and those who were utilitarian. The hedonic shoppers appreciated immediately how the tool could replicate the instore browsing, enable more random finds and engage their interest for longer than the filtering search systems that dominate. Yet the utilitarian minded shoppers expressed worries that they would be unable to find the books they were looking for using this method of browsing. Shopping motivation therefore seemed to affect the interaction with and appreciation of web atmospherics.

In terms of serendipitous discoveries, some participants believed they would be more likely to come across new books using the Infinite Bookshelf, as it would persuade them to browse longer and therefore allow them more possibilities to have their eye caught by an interesting, unknown product:

Anne: 'It would probably make me look at more books. It would, yeah, not just the one that I'm wanting to purchase'. Another participant agreed that the increased propensity to browse using a tool like this could increase the chance of serendipitous discoveries:

Mike: 'I think the chances would be higher, to stumble across something new than they are now'.

Yet shoppers who gained enjoyment from the online space in terms of how it facilitated easy and convenient purchases took a more negative approach to the tool, as one more utilitarian-minded participant described:

Joss: 'I can probably buy books without this kind of fancy thing going on.'

For those who utilised the online space for goal-oriented shopping, this tool was deemed unnecessary, and could even negatively affect their enjoyment of the quick, easy online shopping process.

The reaction of respondents suggest that shopping motivations and orientations appear to effect reactions to web atmospherics. For those who shopped hedonically for books, a tool that increased their propensity to browse as they would instore and offered a visually appealing alternative to the dominant online browsing tools. Significantly, these shoppers also mentioned how the Infinite Bookshelf could increase their chances of 'stumbling across' something new online. Yet the goal-oriented online shoppers who appreciated the ability to quickly filter out books that do not interest them to find what they are looking for expressed concerns that this tool could slow down this process. These shoppers did not appreciate the potential for the Infinite Bookshelf to increase serendipity, as coming across unknown products was not their intention when they shopped online.

#### *4.4.6 Summary of interview findings*

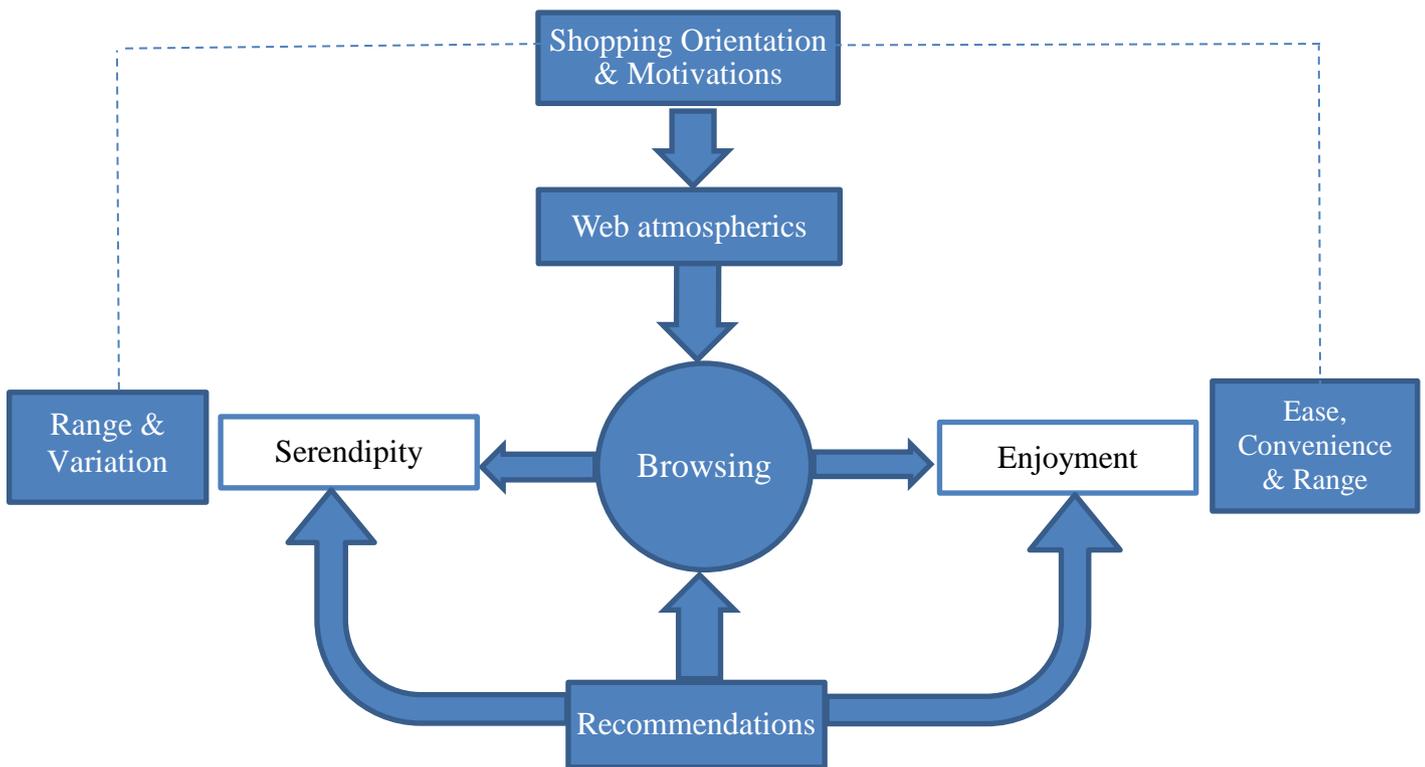
After an investigation of the factors infecting both serendipity and enjoyment as part of the online book-buying process, there is a clear cross-over between certain key influences. Figure 4.4 shows the relationship between the two key variables.

As Figure 4.4 shows, shopping orientation and motivation is an overarching factor which influences both enjoyment and serendipity. It also influences browsing, with more hedonically motivated shoppers feeling encouraged to browse, but those with clear goals

avoiding this activity. Browsing itself was the biggest influencer on both serendipity and enjoyment, and appeared to be the link between these two factors. Motivation to browse was influenced by either external (atmospheric) factors, or internal (orientations and motivations) factors, and those who partook in it experienced more enjoyment and stumbled across unexpected products more often. Ease and convenience effected enjoyment and was felt more keenly by those who were motivated by utilitarian purposes. Recommendations influenced serendipity and enjoyment directly and through the uniting factor of browsing. Using these findings, some conclusions will now be drawn from both sets of analyses (quantitative and qualitative) followed by some recommendations for online bookstores.

**Figure 4.4**

**Relationship between variables found to affect serendipity and enjoyment.**



## **5: Conclusions and recommendations**

### **5.1 Study aims**

This study aimed to contribute to the theoretical understanding of shopper perceptions regarding the online space, within the context of book retail. Building on evidence from previous studies which found that those shopping for books may be positively influenced by the presence of serendipitous finds, the study sought to understand whether online consumers may also find enjoyment from the increased possibility of serendipitous finds. Socially, the study hoped to offer solutions to the ‘Amazon problem’ so succinctly summarised by Henry Mount: ‘You can fit more books in an aircraft hangar, but you cannot browse through them so enjoyably’ (2011). Quantitative methods were employed to understand if a link between the presence of serendipity and the enjoyment of the online space existed, and qualitative interviews looked to unravel these results and offer possible solutions for bookstores looking to improve their online sites. In short, the study aimed to help bookstores offer customers an experience that differs from the retail giants, with whom they have been forced to compete in the online space due to the COVID-19 pandemic.

### **5.2 Limitations**

Although attempts were made to ensure a fair and unbiased sampling strategy, it is prudent to note that this study recruited participants from an online space. Both the quantitative and qualitative research participants were individuals who already had a presence online. This may well have resulted in different perceptions of the online space compared with those who have a lesser presence online. Further research should investigate if perceptions towards online shopping differ in groups who are less habituated to online environments. Furthermore, as the survey was distributed through social media pages for avid book readers, the resultant sample was compiled of book fans. This sampling was chosen to ensure that participants were sufficiently experienced with the online book-buying process to give a detailed explanation of their perceptions on the activity. Yet as the chosen participants often purchased books as a hobby, this may have changed their relationship with the shopping process. Therefore, this study should be recognised as indicative of how the book-reading community view the online book-buying process. Further research could strengthen the findings of this study by evaluating if similar results are achieved through a more varied sample.

### 5.3 Conclusions

A relatively weak correlation was found between the two variables of enjoyment and serendipity as part of the online book-buying process. Some variation in this correlation existed when certain groups were isolated, namely those who were frequent buyers of books, and those who had non-specific motivations when shopping online. Quantitative interviews substantiated this result, finding that there was indeed a change in consumer perceptions depending on shopping motivations and orientations. Little evidence, however, could be found to substantiate the claim that the presence of serendipitous experiences online significantly increased consumer enjoyment of the online book-buying process. Finding unexpected books instore appeared to be a key draw of the brick-and-mortar shopping experience, substantiating findings by Laing and Royle (2013), but online this effect appeared to be limited. This finding opposes the expectation, developed by Demangeot and Broderick (2006), that consumers seek similar experiences online as they do instore, and appreciate the two shopping methods in the same way. Instead, those shopping for books online seem to have a clear idea of what they expect from the online space, which differs greatly from their expectations instore. This study therefore adds to the extant literature that has found online shoppers behave in fundamentally different ways to instore shoppers (Donthu & Garcia, 1999; Rohm & Swaminathan, 2004; Swaminathan et al., 2006; Wolfinbarger & Gilly, 2001).

When substantiated with interview data, the connection between serendipity and enjoyment can be attributed to the role of browsing. Several dimensions had a clear positive influence on both enjoyment and serendipity online; namely recommendations, browsing, and shopping orientation and motivation. Recommendations online increased shoppers' propensity to browse online, by drawing them in to other lists of books that may interest them. Those who were hedonically motivated and non-goal-oriented showed an increased propensity to browse and enjoy such a process. Those who shopped hedonically were also more likely to experience serendipity due to their 'prepared minds', substantiating the claims made by McCay-Peet and Toms (2015) and Makri and Blandford (2012a), that precipitating conditions influence the chances of consumers experiencing serendipity. Subsequently, browsing (itself influenced by recommendations and orientations/motivations) appears to be a determining factor in the increase of both serendipity and enjoyment as part of the online book-buying process.

Browsing had a clear, positive impact on both serendipity and enjoyment; when book consumers engage in browsing, their enjoyment of the process increases, as does their

potential for serendipity. This in turn could lead to greater periods of time spent online and more impulse buys, as shown by Childers et al. (2001). Therefore, serendipitous browsing, and the systems that enable this, positively influence enjoyment as part of the online book-buying process.

#### **5.4 Social and theoretical implications and future avenues of research**

The results of this research suggest that book retailers, and possibly the wider e-retailing industry, should focus on the way they promote their online retail spaces. Interview data confirms that consumers avoid browsing online not because of technological or navigational barriers, but because of personal predispositions. Even with the impact of the pandemic, many still perceive the online space as appropriate for necessity-driven and goal-oriented buying, and not for hedonic or speculative browsing. Readers rarely reported making an act of discovery within the web shop itself, and apart from a few exceptions had relatively short browsing times. Atmospheric, as shown by the reaction to the Google Infinite Bookshelf tool, could encourage more online browsing, which may well lead to more unexpected finds, impulse buys and customer loyalty (Childers et al., 2001). As discussed in section 2.4.1, the extant literature finds that atmospheric can positively impact enjoyment online. But the results of this study highlight that if consumers do not enter the online space with browsing motivations, then improving atmospheric may be obsolete. This finding invites research into the limits to which atmospheric can improve the online experience.

The impact of personal motivations and orientations on online shopping enjoyment emphasises the need for personalisation of the e-retailing experience. Results substantiate the case made by Kim et al. (2017) for curated recommendation systems which allow for every consumer to customise their experience, and the items they are exposed to. As suggested by Pallis et al., (2007) and Yen (2007), multiple tools may be developed as part of the online retail environment so that hedonically motivated shoppers can experience the experiential intensity desired, whereas utilitarian and goal-oriented shoppers can quickly find what they need, compare prices and make swift purchases. Online book retailers must appreciate the varying motivations of their consumers and utilise the flexibility and customisation of the online environment to cater to all. More detailed, experimental research is necessary to evaluate if and how consumer perceptions can be altered to increase their propensity to browse hedonically online. Furthermore, as this research has focused specifically on books as hedonic products, there are avenues for future studies to evaluate whether shopping for other hedonic products is perceived in a similar way.

This study highlight how a ‘prepared mind’ has a significant impact on both frequency of felt serendipity and perceived enjoyment, yet more research is necessary to find out how retailers can ‘prepare’ the minds of shoppers to appreciate serendipity as part of the online book-buying process. As we move into a world where leisure is increasingly digitalised, there are clearly still offline benefits that are stubbornly untransferable to the online space. If online book retailers are to take full advantage of the browsing desires of purchasers, they must find avenues to open the mind of the consumer to the experiential possibilities of the online space.

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## **Appendix A**

### **Interview Guide**

#### INTRODUCTION

- Self-introduction, explanation of research, informed consent, permission to proceed and assurance that the interview can be stopped at any time.

#### READING HABITS

- Tell me about what kind of books you usually read and buy. (ebooks or normal books?)
- What are your favourite genres?
- Approximately how many books would you read in a year?
- Do you have favourite authors that you stick to or do you like to discover new books/authors?
- Do you follow the bestseller list?

#### SHOPPING AND YOU (to determine if they usually enjoy the shopping process online and offline)

- Do you enjoy shopping in general? Do you often go shopping as an activity in itself?
- When you go out for a shopping trip do you usually have a goal in mind?
- How do you evaluate if a shopping trip was successful or not?
- Do you enjoy online shopping?
- Do you consider yourself experienced as an online shopper? In general do you prefer shopping instore or online?

#### CHOOSING BOOKS

- When you want to buy a new book, what information do you look for to help you with that decision?
- Do you read blogs or critical opinions?
- Do you like to see the physical book before buying it?
- Are you influenced by the cover of a book or the contents on the outside?
- Do you prefer to read a preview of the book before buying?

- In general, do you buy books that you are certain are ‘for you’ e.g. written by your favourite author, critically acclaimed, recommended by a friend, or do you take a chance often on books?

### SHOPPING FOR BOOKS – INSTORE

- Before the pandemic, where would you buy the majority of your books? Why is that your favourite place to shop?
- How often did you used to go there?
- When you shop for books, is it always because you need a new book?
- When you look for a book, approximately how often do you end up buying one? E.g. do you often browse without buying?
- When you walk into a shop, how do you decide where to start looking?
- Do you usually have a goal when you go to this shop?
- Do you often discover new books when you go into this shop?
  - ➔ Can you describe a time when this happened and you ended up buying the book?
- When you have finished your shopping, how do you evaluate the success of the trip?
- What drawbacks do you see in shopping for books instore?

### SHOPPING FOR BOOKS – ONLINE

- Which is the online bookstore that you buy from the most?
- Why is this your go-to shop?
- When you shop for books, is it always because you need a new book?
- When you look for a book online, how often do you end up buying a book? (Is there a difference with this conversion rate and the instore conversion rate?)
- How do you start looking for a book online?
- Do usually have a motivation for starting your search?
- Do you often discover new books that you didn’t know about on this shop?
  - ➔ Can you remember an example when this happened and you ended up buying the book?
- What are the drawbacks to shopping for books online?

### SERENDIPITY

- Show a demo of Google's Infinite Bookshelf (a serendipity-inducing book-browsing tool) <https://bookcase.chromeexperiments.com/>
- Have you ever seen a system like this on any online bookstore? Would you use a tool like this to browse for or buy books? Can you see any disadvantages to this?
- Do you often find books that you weren't expecting to find when you are shopping online?
- How do you feel when you find a book that you weren't expecting to find?
- Is discovering new authors part of the fun of shopping for you?

### PERFECT WEB SHOP

- Based on your experiences shopping online for books, but also keeping in mind what you enjoy about shopping for books in store, what would like to see on your ideal online bookstore?
- Prompts: How would the books be sorted? What kind of search system would you use? Would you like the system to recommend books based on your past purchases? (algorithms) What do you think about having a social element to the website e.g. see what your friends are buying?

### CONCLUDING REMARKS

- Thank the participant, ask if they have any concluding remarks and repeat that their data will not be retained after the research is concluded.

### Visual prompts

**Figure 3.3.1**

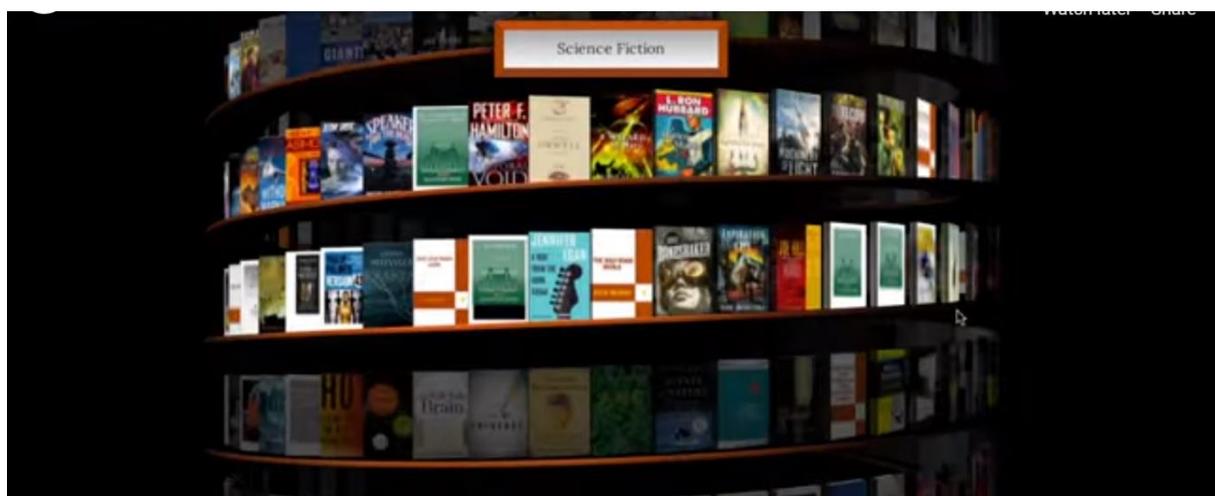


Figure 3.3.1

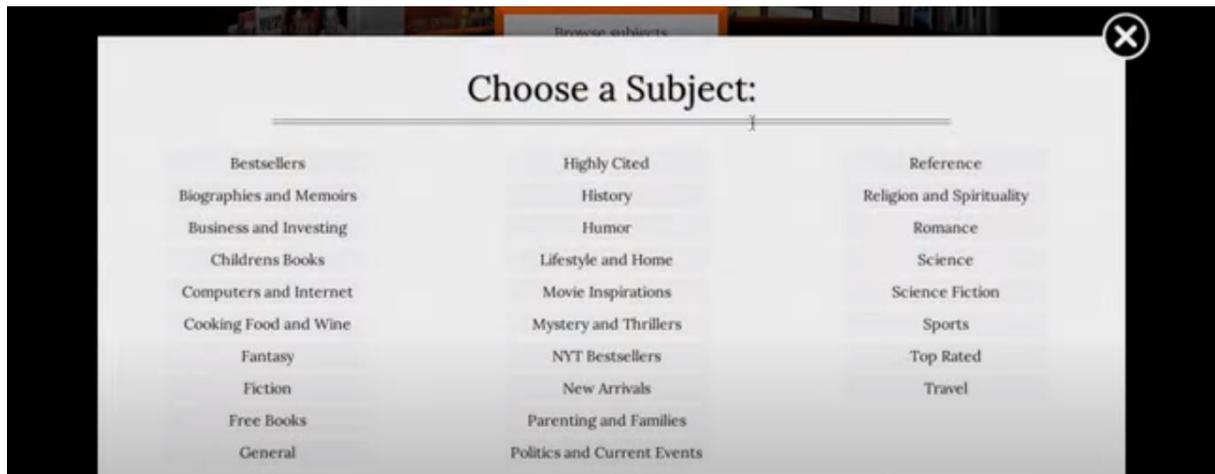


Figure 3.3.2

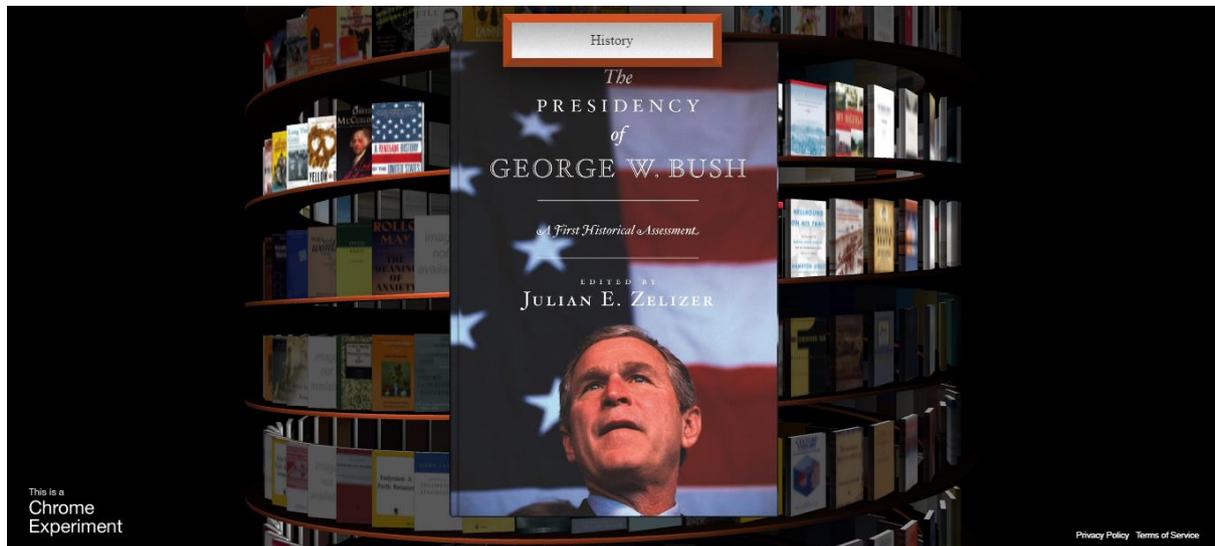
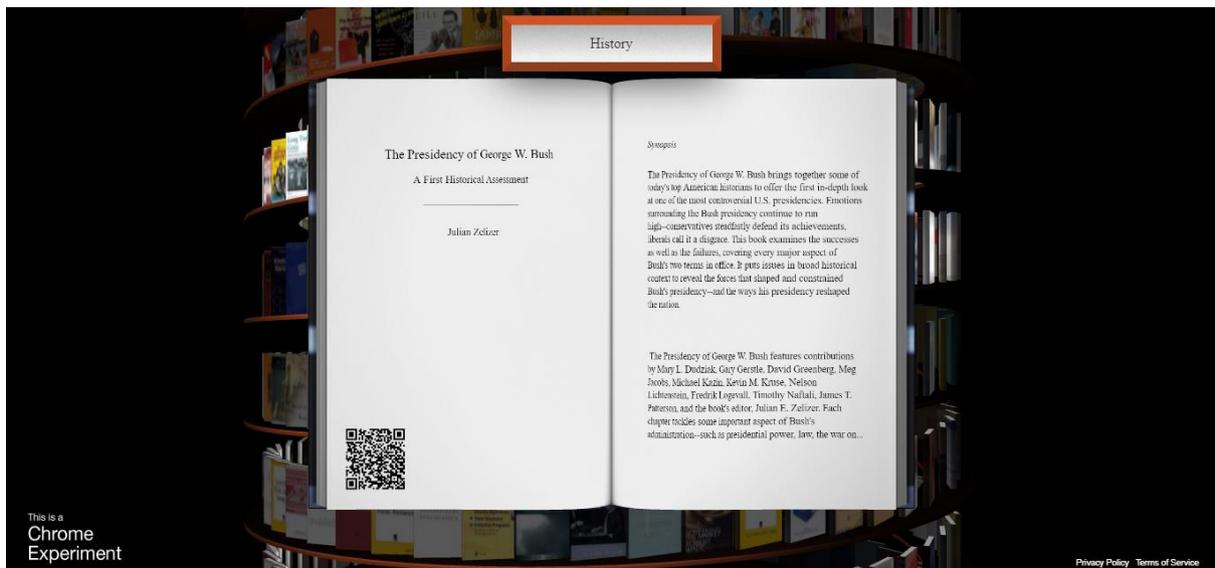


Figure 3.3.3



## Appendix B

### Survey

Thank you for taking part in this survey into the use of online bookshops and the online browsing process.

The survey will ask about your experiences of visiting online bookshops, and how you appreciate the online environment.

If you don't remember your last online bookshop visit, feel free to take some time now to browse your favourite online bookshop for a few minutes before completing this survey.

The survey will take a maximum of 10 minutes. At the end, you will be invited to leave an email address if you wish to take part in further stages of this research. These details will only be used as part of the research and will be deleted on its completion.

Enjoy the survey and thank you in advance for your participation.

Q1.2 I agree that my answers may be used for the educational purposes of this study

I agree (1)

I do not agree (2)

Q1.3 In the past year, have you used an online bookshop to browse for or purchase a book?  
(This includes websites that do not exclusively sell books, such as Amazon or bol.com).

Yes (1)

No (2)

- Skip To: Q1.5 If In the past year, have you used an online bookshop to browse for or purchase a book? (This includes = Yes)
- Skip To: Q1.4 If In the past year, have you used an online bookshop to browse for or purchase a book? (This includes = No)

Q1.4 As you have selected that you have not visited a bookshop in the past year, please take some time to visit a bookshop of your choice so that you are able to answer the questions in the rest of the survey.

Here are some bookshops that you may wish to browse:

- Amazon Books, Waterstones (UK), Bookshop.org (UK or USA), The Book Depository Bol.com (NL), BookSpot (NL)

(Skip To: Q1.5 As you have selected that you have not visited a bookshop in the past year, please take some time... Is Displayed)

Q1.5 Please write the name of the bookshop that you used most recently to browse for or purchase books.

---

Q1.6 Approximately how long has it been since you last browsed for/purchased a book on this website?

Less than a week (1)

1-3 weeks (2)

1 month (3)

1-3 months (4)

More than 3 months (5)

Q2.1 The first part of the survey will ask you about how much you enjoyed your visit to the online bookshop you entered above, and your feelings about the experience you had. Please answer as honestly as possible, as your memory allows.

Q2.2 Keeping in mind the online shop you mentioned at the start of this survey, please state how far you agree with the statements below.

- Agree (1) Somewhat agree (2) Neither agree nor disagree (3) Somewhat disagree (4) Disagree (5)

I enjoyed browsing on this online shop for its own sake, not just for the items I may have purchased. (1)

Compared to other things I could have done, the time spent browsing on this online shop was truly enjoyable (2)

I felt a sense of escapism whilst browsing on this online shop. (3)

I continued to shop, not because I had to, but because I wanted to. (4)

Q2.3 Whilst visiting the online shop that you mentioned at the start of this survey, how did you feel?

- Agree (1) Somewhat agree (2) Neither agree nor disagree (3) Somewhat disagree (4) Disagree (5)

I was deeply engrossed. (1)

I was absorbed intently. (2)

My attention was focused. (3)

I was concentrated fully. (4)

Q2.4 On completing your online browsing, how did you feel?

- Agree (1)Somewhat agree (2)Neither agree nor disagree (3)Somewhat disagree (4)Disagree (5)

I was happy (1)

I was pleased. (2)

I was contented. (3)

I was satisfied. (4)

Q2.5 How would you describe the overall experience of visiting the online shop you mentioned at the start of the survey?

- Agree (1)Somewhat agree (2)Neither agree nor disagree (3)Somewhat disagree (4)Disagree (5)

It was fulfilling. (1)

It was worthwhile. (2)

It was rewarding. (3)

It was useful. (4)

The next part of the survey will look at your motivations to shop online, and whether you were surprised by the results you encountered whilst browsing. Please answer as honestly as possible, as your memory allows.

Q3.2 Which of the following statements best reflects your motivations for visiting an online bookshop?

I had a specific goal in mind. (E.g. I wanted to buy a specific book.) (1)

I didn't have a specific goal, but I did go to the bookshop with a purpose. (E.g. to buy a new book, but without a specific book in mind) (2)

I had no goals, I just wanted to browse the bookshop's catalogue. (3)

Q3.3 Whilst I was visiting the bookstore, the website...

- Agree (1) Somewhat agree (2) Neither agree nor disagree (3) Somewhat disagree (4) Disagree (5)

Triggered unexpected encounters with books that seem worth exploring. (1)

Provided some surprising yet interesting ideas for books. (2)

Delivered unexpected but useful findings about books. (3)

Q3.4 During my visit to this online shop...

- Agree (1) Somewhat agree (2) Neither agree nor disagree (3) Somewhat disagree (4) Disagree (5)

I bumped into unexpected content. (1)

I come across books by chance. (2)

I was exposed to unfamiliar books/authors. (3)

Q3.6 How experienced are you in shopping online? Rate your experience from 1 (I had never shopped online before) to 10 (I shop online often and have done so for a long time).

1 2 3 4 5 6 6 7 8 9 10

Q3.7 When it was possible, how often would you visit traditional (brick-and-mortar) bookshops to browse for/purchase books? Choose the option that best fits your shopping habits.

Once a week (1)

Once a month (3)

Once every 2-3 months (2)

Once a year (4)

Never, I have always shopped for books online (5)

The final part of the survey will ask you some questions about yourself. Your personal details will be shared only amongst researchers and supervisors, and will not be retained after the finalisation of the study.

Q4.1 What is your age?

0-15 (1)

16-30 (2)

30-45 (3)

45-60 (4)

60+ (5)

Q4.2 In which country do you currently live? Please enter the name of the country below.

---

Q4.4 Thank you for taking part in my survey about online shopping for books! Your answers have been recorded and will only be used for research purposes.

Do you want to be considered to take part in further stages of the research? Please leave your email address below and I will be in touch if necessary. Your details will not be treated with confidence and will not be retained after the completion of the study.

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## Appendix C

### Tables

**Table 4.1**

**Correlation matrix serendipity and enjoyment motivation group 1**

	Serendipity	Enjoyment
Serendipity	1.00	.51
Enjoyment	.51	1.00
*Correlation is significant to the .05 level		

**Table 4.2**

**Correlation matrix serendipity and enjoyment motivation groups 2 and 3**

	Serendipity	Enjoyment
Serendipity	1.00	*.26
Enjoyment	*.26	1.00
*Correlation is significant to the .05 level		

**Table 4.3**

**Correlation matrix serendipity and enjoyment total**

	Serendipity	Enjoyment
Serendipity	1.00	** .32
Enjoyment	** .32	1.00
**Correlation is significant to the .001 level		

**Table 4.4**

**Correlation matrix serendipity and enjoyment book fans**

	Serendipity	Enjoyment
Serendipity	1.00	** .46
Enjoyment	** .46	1.00

\*\*Correlation is significant to the .001 level