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CONSUMER ONLINE BROWSING: CONCEPTUAL DEFINITION, THEORETICAL
AND MANAGERIAL IMPLICATIONS

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Campo do conhecimento: Marketing

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ABSTRACT

Consumer Online Browsing (COB) is a distinct behavior in consumer behavior literature that needs further research in literature. This dissertation aims to conceptually define COB and discuss theoretical and managerial implications of COB for consumers. This dissertation begins with a theoretical study about compulsiveness, a topic that has been extensively discussed in consumer behavior literature, with most of studies focused on the purchase stage. Both pre and post purchase stages, however, have gained relevance in marketing literature due to the multiple touch points consumers have to connect with brands, and companies. This dissertation is composed of three articles. The first applies the consumer journey framework to assess how compulsiveness is being discussed in these stages with the objective of proposing a research agenda for future studies. One of the topics that is in lack of research is browsing, and this is the connection to the following studies presented in this dissertation. Consumer online browsing (COB) is not conceptualized as a distinct behavior in literature, as it is often discussed as offline browsing, or exploratory search. It includes, however, characteristics that show its uniqueness. One exploratory qualitative study compared online with offline browsing, and listed characteristics that distinguish these behaviors. A survey with 517 participants in Brazil and in the US was conducted and results showed that COB is a distinct because in comparison with offline browsing leads to more product knowledge, increases purchase intention, promotes serendipity findings in products and brands, and does not lead to impulsive, unplanned buying, as it happens with offline browsing. In the third article three experiments were conducted with participants in Brazil and US, and results showed that COB leads to an increase in product knowledge and purchase intention. When there is a high involvement with the product and the motivation for browsing is hedonic, the impact on both variables is intensified.

KEYWORDS:

Browsing, online browsing, exploratory search, goal-directed search, compulsiveness

RESUMO

Consumer Online Browsing (COB) é um comportamento distinto na literatura de comportamento do consumidor que precisa de mais pesquisas na literatura. Esta dissertação tem como objetivo definir conceitualmente o COB e discutir implicações teóricas e gerenciais do COB para os consumidores. Esta dissertação começa com um estudo teórico sobre compulsividade, tópico amplamente discutido na literatura de comportamento do consumidor, com a maioria dos estudos voltados para a fase de compras. As etapas de pré e pós-compra, no entanto, ganharam relevância na literatura de marketing devido aos vários pontos de contato que os consumidores têm para se conectar com marcas e empresas. Esta dissertação é composta por três artigos. O primeiro aplica a estrutura da jornada do consumidor para avaliar como a compulsão está sendo discutida nessas etapas com o objetivo de propor uma agenda de pesquisa para estudos futuros. Um dos tópicos que faltam pesquisas é a navegação, e essa é a conexão com os seguintes estudos apresentados nesta dissertação. A navegação online do consumidor (COB) não é conceituada como um comportamento distinto na literatura, pois é frequentemente discutida como busca em lojas físicas ou pesquisa exploratória. Inclui, no entanto, características que mostram sua singularidade. Um estudo qualitativo exploratório comparou online com a busca em lojas físicas e listou características que distinguem esses comportamentos. Foi realizada uma pesquisa com 517 participantes no Brasil e nos EUA, e os resultados mostraram que o COB é distinto porque, em comparação com a busca em lojas físicas, leva a mais conhecimento do produto, aumenta a intenção de compra, promove resultados de acaso em produtos e marcas e não leva a compra impulsiva e não planejada, como acontece no contexto físico. No terceiro artigo, foram realizadas três experiências com participantes no Brasil e nos EUA, e os resultados mostraram que o COB leva a um aumento no conhecimento do produto e na intenção de compra. Quando existe um alto envolvimento com o produto e a motivação para a navegação é hedônica, o impacto em ambas as variáveis é intensificado.

PALAVRAS-CHAVE:

Pesquisa de produto, pesquisa online de produto, compulsão de consumo, pesquisa exploratória de produto, pesquisa dirigida de produto.

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CHAPTER 1 – GENERAL INTRODUCTION

When the concept of consumer journey (Court, Elzinga, Mulder, & Vetvik, 2009; Lemon & Verhoef, 2016) started to be discussed in Consumer Behavior (CB) literature, it rapidly became a popular topic as it proposes a broader perspective in the analysis of purchase behavior. Instead of focusing only on the purchase stage per se, this framework proposes that either previous and post purchases stages are relevant to understand and discuss consumer behavior (Lemon & Verhoef, 2016). This broader perspective enriches the perception of topics, especially those who have been exhaustively discussed in the literature. Compulsiveness in consumer behavior is a good example of such type of topic.

Compulsiveness is extensively discussed in CB literature (Hirschman, 1992; Mowen & Spears, 1999; Ridgway, Kukar-Kinney, & Monroe, 2008b; Rook, 1987; Valence, d'Astous, & Fortier, 1988), and amongst the many discussions about the topic, it is challenging to identify areas that need to be further discussed in the literature. In the first part of this dissertation, I applied the consumer journey framework to perform an extensive literature review of compulsiveness in the three stages of purchase: prepurchase, purchase, and postpurchase, and found that indeed the purchase stage is vastly discussed with 11 main topics in CB literature (e.g. Affect, Scales, Big Five Personality), but I identified areas that need further research in the other two stages. In Postpurchase stage, I identified seven topics in CB literature (e.g. Hoarding, Binge eating, Compulsive Gaming), but some of these topics are recent and still needs further research, such as Binge Watching (Jenner, 2016), that is the compulsive use of streaming media services, such as Netflix, Compulsive use of dating apps (Orosz, Tóth-Király, Bóthe, & Melher, 2016) such as Tinder, Grindr, and consequences for consumers, and compulsive use of Social Network Sites, such as Facebook and Instagram (Hormes, Kearns, & Timko, 2014; Kircaburun & Griffiths, 2018). In the Prepurchase stage, however, I could only identify one topic related to compulsiveness that is couponing (Bawa & Shoemaker, 1987; Ieva, De Canio, & Ziliani, 2016), a behavior where consumers compulsively look for discount coupons to be used in future purchases. There was no relevant study about other types of prepurchase behavior, such as compulsive browsing.

The use of the consumer journey framework helped identify areas that need further research about compulsiveness in CB literature. Amongst these areas, the one that caught my attention was compulsive browsing, as I identify myself as one. But when I started to research about browsing as a CB in literature, I could not identify research that treated browsing as compulsive behavior, and I also realized that browsing was treated as a CB only in the offline context, where browsing was defined as the act of looking around in stores, without any intention to purchase (Bloch & Richins, 1983), where consumers either engage in (offline) browsing for fun or to get information. I was able to identify other concepts related to browsing, such as ongoing search (Bloch, Sherrell, & Ridgway, 1986), retail therapy (Rick, Pereira, & Burson, 2014), or thrift shopping (Bardhi & Arnould, 2005), but none of them treated specifically about online browsing, in a similar manner as the concept of offline browsing was discussed by Bloch & Richins (1983). Online browsing is discussed in literature either as a type of online search (Moe, 2003; Rowley, 2001) or through the analysis of consumers' clickstreams when they browse online (Hauser, Urban, Liberali, & Braun, 2009; P. Huang, Lurie, & Mitra, 2009). Both approaches discuss components of consumers' online browsing behavior but do not offer sufficient insights about the antecedents, motivations, and consequences of consumers' online browsing behavior, and this is the gap in the literature that this dissertation aims to fill.

In the second part of this dissertation, I propose a definition for consumer online browsing. First, I discuss all related topics in the literature about online and offline browsing behavior, as well as including characteristics of browsing that has been discussed in Information Search (IS) literature. For some of these characteristics of browsing in IS, I could not find discussions that support these characteristics in CB literature. One example is the occurrence of serendipity findings in browsing. In IS one characteristic of browsing is serendipity finding, something that happens when individuals scan through several types of information and unexpectedly find useful information (Bates, 2007; Hjärland, 2011). Similarly, it is expected that when consumers engage in online browsing, they experience some serendipity findings due to their online browsing behavior, but I could not find literature that discusses this characteristic in CB literature. Intending to confirm if this and other characteristics of browsing are relevant to the concept of online browsing in CB literature, I performed two empirical studies, comparing online browsing with the existing concept of offline browsing (Bloch & Richins, 1983): (i) 19 exploratory interviews, comparing consumers perceptions of their offline and online browsing behavior, and (ii) an experimental survey with 517 participants, where the differences of offline and online browsing behavior were empirically tested. These empirical

studies were conducted in two different countries, Brazil and the United States, to improve the generalizability of the findings, offering more robust support for the findings that established the proposed conceptual definition for Consumer Online Browsing (COB) behavior.

Results showed that when browsing online, consumers lose track of time. It is an activity that distracts consumers from performing unwanted tasks in their daily routine, for which they often feel reluctant to return to. A positive outcome of online browsing is that consumers feel they acquire more product knowledge. When they perform offline browsing, they need to plan ahead of the activity (cannot do it spontaneously, without previous planning), feel pressured to buy (by the presence of salespeople), buy impulsively – or buy things they did not plan to buy, and feel anxious. With the results of these empirical studies, as well as comparison of what has been discussed about browsing in literature, I propose that Consumer Online Browsing (COB) is a dynamic and iterative online act of looking around on commercial website(s), with a purpose of simply exploring products and services for fun, to distract or entertain oneself, whereby purchase intention is low. COB is dynamic because certain triggers, such as encountering an interesting and desirable product, for example, may lead to active purchase consideration, transitioning to another (e.g., competitor) website, or expanded information search, all of which are outside the scope of what we consider COB to be. COB can be an iterative behavior because consumers may often, and rather seamlessly in the online context, traverse between COB (low and diffused, if any, purchase intention) and pre-purchase evaluation (high and focused purchase intention). COB is distinct from previously investigated offline browsing (Bloch & Richins, 1983) and online direct buying search (Moe, 2003).

As the definition proposed for COB is closely related to either information search or prepurchase search behavior, two examples of what is COB and two examples of what is not COB may help illustrate the definition proposed for COB. When a consumer is reading their email, and receive a newsletter of a sales in Amazon and they decide to click on it and start browsing the website to see what is on sale, they are engaging in COB behavior. Or when a consumer visits Westwing or Zara website, just to see if there is any new product or any new sales, and start browsing there, they are engaging in COB behavior. But if a consumer is reading the news and see an ad of insurance policies, and click on this ad because it reminded them that they need to renew their insurance, and they start looking for information about the insurance, aiming to find the best alternative to buy, they are not engaging in COB behavior, because their goal is to find the best alternative to buy, and not to explore – or browse – the products and

services they have to offer. Instead of COB, they are engaging in prepurchase behavior, where purchase intention is high and the goal is to find the best alternative to buy. Also, when consumers are looking for information about a product in an informational website (such as news website, or even Google) where purchasing is not a possibility, they are not engaging in COB behavior because there is no purchase intention, and their goal is to gather information about specific products or services.

Following the definition proposed for COB behavior, I performed three experiments that aimed to find empirical evidence of the outcomes of such behavior to consumers. Two main dependent variables were chosen to evaluate the outcomes of COB: Product Knowledge (PK) and Purchase Intention (PI). PK is related to the outcomes of COB for consumers and PI is related to the outcomes of COB for companies and brands. The first experiment was run in the US with 549 participants from Qualtrics consumer panel. This experiment aimed to verify how the different types of search inside COB behavior, where consumers may present either an exploratory (low PI) and goal-directed (high PI) types of search, and how these different types impact on PK and PI. Results found that when consumers are involved with a product, there is a positive impact on their PK that is statistically significantly higher ($p=0.023$) than when they are performing a goal-directed type of search. When consumers are interested in a product, the positive impact on PI is statistically significant higher ($p=0.037$) in a goal-directed type of search (in comparison with the exploratory type of search).

The second experiment aimed to compare the impact of COB in PK and PI in comparison with Prepurchase behavior, where consumers compare options to choose the best alternative. This experiment also tested the impact of product interest (high x low). 611 valid responses from participants of Toluna's consumer panel in Brazil were analyzed. Results show that COB impacts positively on PK ($p=0.014$), on PI ($p=0.046$), and when consumers have a high involvement with the product, this impact is also statistically significant higher on PK ($p<0.001$) and on PI ($p<0.001$) when the involvement is low, showcasing that product involvement is a key characteristic of the impact of COB on PK and on PI.

The third experiment aimed to verify if hedonic motivation would be a relevant characteristic of browsing, 511 valid responses from Toluna's consumer panel in Brazil were analyzed in this experiment. Results reinforce the positive impact of COB on PK ($p=0.014$) and PI ($p=0.021$) but the impact of hedonic motivation was not statistically significant on PK. It is

expected that when the motivation is hedonic, PI is higher for COB than in Prepurchase condition. This was found when the motivation is utilitarian, but not when it is hedonic. Contrary to what was expected, when the motivation is hedonic, PI is the same for both conditions. Therefore, the interaction between COB and hedonic motivation is statistically significant ($p=0.02$). Results also show that COB impacts positively on positive emotions such as joy, excitement, hope, excitement, and happiness.

Altogether the results of these three experiments present relevant findings that contribute to the consumer behavior literature. Results show that COB is indeed a distinct behavior that impacts consumer behavior, more specifically their perception of product knowledge. When consumers feel more knowledgeable about products, they feel more empowered in their relationship with brands and companies, which may potentially help improve their well-being sensation. Results also show that COB has positive impacts on emotions consumers feel towards the browsing experience, such as joy, hope, and happiness, which reinforces the relevance of COB in consumer behavior literature. For brands and companies, it is important to notice that COB also impacts positively on purchase intention, meaning that when consumers engage in COB, their intention to buy a product may increase, possibly suggesting that online browsing may be a valuable tool to engage consumers with their products and brands. Frustration with time spent browsing and anxiety related to purchasing are negative sentiments that are discussed in the results of these experiments, possibly demonstrating that COB may also lead consumers to negative outcomes.

1.1. Dissertation Structure

The dissertation is composed of three papers, each of which has a specific objective and discussion. They are connected in a logical manner, focusing on a specific topic. I decided to name each of the three papers using titles resembling those of movies that are somehow related to the discussion addressed in each, because I believe that this sort of abstraction enhances the discussion in a positive way, and improves the readability and clarity of the text. The three papers are briefly explained below, along with the research questions addressed in each.

The **first** paper is called “Journeys of a shopaholic: Discussions about compulsiveness in the consumer journey.” The title was inspired by the motion picture *Confessions of a Shopaholic*. This study investigates how compulsiveness has been discussed in consumer research, taking into consideration the consumer journey framework (Lemon and Verhoef, 2016). Inspired by the studies of Faber et al. (1987), Hirschman (1992), and Lemon and Verhoef (2016), I conducted an extensive literature review about compulsiveness in the three stages of the consumer journey, and identified topics that require further discussion in relation to compulsiveness. The objective of this paper is to present a research agenda of topics that need to be further explored in the consumer behavior literature, using the three main stages of the consumer journey—prepurchase, purchase, and postpurchase—framework as a reference. I decided to use this framework because it draws upon a broad perspective of discussions about compulsiveness, a topic that has already been extensively discussed in marketing and several other disciplines, such as psychology, addiction, and information technology. As a compulsive buyer myself, I wanted to examine what could be researched in relation to this topic; this formed my motivation to perform the first study. When writing my proposed research agenda, I realized that prepurchase was the stage for which few studies related to compulsiveness have been published. In addition, I was unable to find any research that addressed online browsing as a compulsive behavior, nor any that treated this as a distinct behavior, in the consumer behavior literature. Therefore, it was this topic that I decided to work on for the remainder of my dissertation

The **second** paper is called “We need to talk about consumer online browsing (COB), A conceptual definition of consumer online browsing” inspired by the movie *We Need to Talk about Kevin*, which addresses the need to discuss controversial and difficult topics such as psychopathy, guilt, and responsibility. The paper, however, conducts a much lighter and more upbeat discussion. The need to talk about browsing is, nevertheless, relevant as it is one of the main areas highlighted in the first paper as being in need of further focus and discussion in the consumer research field. The objective of this paper is to conceptually define COB as a distinct consumer behavior. Inspired by the seminal work of Bloch and Richins (1983), I conducted an extensive review of literature related to browsing, which included topics such as window shopping (Black, 2007; Moe, 2003); retail therapy (Rick, Pereira, & Burson, 2014; Townsend & Sood, 2012); and mind wandering, daydreaming, and fantasizing (Darrat, Darrat, & Amyx, 2016; Mar, Mason, & Litvack, 2012; Schupak & Rosenthal, 2009). I included several concepts related to browsing behavior extracted from other areas, such as information search (e.g.,

serendipitous findings and exploratory behavior), and compared COB with offline browsing behavior as a way to frame COB as a distinct behavior. I conducted two studies: the first was qualitative, and this served as a guide to a second that was quantitative in nature. The qualitative study included 19 exploratory interviews with consumers from four different countries—Brazil, Germany, Hungary, and the United States, to understand how COB differs from offline browsing. Coding and analysis was inspired by framework analysis (Srivastava & Thomson, 2009), and 12 main topics emerged from these interviews. These topics were quantitatively explored in an experimental survey with 517 respondents in the United States and Brazil. Results highlighted characteristics that make COB distinct from offline browsing: in COB, consumers are exposed to a rich variety of products and brands that they can browse. In addition, COB is often used as a way to avoid unwanted tasks, and to acquire information about a product. Consumers often lose track of time and are reluctant to return to tasks, showing some characteristics of compulsiveness in this behavior. In comparison with offline browsing, however, COB does not lead consumers to engage in impulsive buying behavior, unplanned buying, and embarrassment in browsing for products or services. According to the results of my survey, these are characteristics consumers relate to offline browsing—an activity that needs to be previously planned, and that consumers feel they are not in control of, making them feel more vulnerable to pressure to buy, and judgment from salespeople.

The **third** paper is called “The adventures of consumer online browsing, Queen of search behavior,” inspired by the movie “*The Adventures of Priscilla, Queen of the Desert*”. This article aims to identify managerial implications of the concepts defined in the previous paper. To this end, I selected two relevant constructs from the consumer behavior literature that have managerial implications related to COB: product knowledge and purchase likelihood. To assess how COB influences these constructs, I conducted three experiments, each with a different objective. The first aimed to verify the impact of high x low purchase intention on COB. During COB, consumers vary from low to high purchase intention, and from diffused to well-defined product to be purchased. The first study aims to address how these different levels impact product knowledge and purchase likelihood. 549 respondents from a Qualtrics consumer panel in the United States participated in this study. In the second study I compare COB with directed buying (DB) behavior when consumers are goal-directed, with a clear intention to buy a product, possibly comparing short-list alternatives (Moe, 2003b). I include in the study covariates that may have different impacts on product knowledge and purchase likelihood, such as compulsiveness, need for touch, and materialism. The second study investigates the impact

of product interest in COB x DB (prepurchase behavior) on consumers' product knowledge, purchase likelihood, and interest in the activity. 611 respondents from a Toluna consumer panel in Brazil participated in the study, and results showed that there are statistically significant impact of COB and product involvement with product knowledge and purchase intention. The third study aimed to verify how hedonic (versus utilitarian) COB impacts these dependent variables (DVs). 547 respondents from a Toluna consumer panel in Brazil participated in the study and results showed that hedonic motivation increases the impact of COB on product knowledge.

Collectively, the findings of the three papers of this dissertation aim to expand the perceptions of marketing practitioners and academics with respect to consumer behavior. The results provide insights about compulsiveness during the consumer journey that may have been overlooked due to the bias of focusing the consumer behavior analysis on the buying action per se, with little consideration of the browsing and COB phenomena.

CHAPTER 2

Article 1 - Journeys of a shopaholic: Discussions about compulsive buying in the consumer journey

“A man will never love you or treat you as well as a store. If a man doesn’t fit, you can’t exchange him seven days later for a gorgeous cashmere sweater. And a store always smells good. A store can awaken a lust for things you never knew you needed.”
Quote from the movie *Confessions of a Shopaholic*

1. Introduction

Confessions of a Shopaholic was a novel series of eight books, the first two of which were adapted into a Hollywood film released in 2009 that became a worldwide hit. This movie and novels tell the stories of Rebecca Bloomwood, a journalist that loves fashion and loves shopping. The main plot revolves around her relationship with her addiction to shopping; she buys compulsively, and this behavior leads her to financial bankruptcy. One possible explanation for the instant and widespread success of the novels and movie may be the identification readers feel with the situations Rebecca faces. Shopping addiction is, in fact, a phenomenon that has been studied in the marketing literature since the 1980s, with a plethora of seminal articles and books published in the 1990s. Nevertheless, it took some time for scholars to use the term “addiction” in relation to shopping behavior.

This article aims to contribute to literature by presenting the topics that are discussed in consumer behavior literature about compulsiveness, adopting a broader perspective, that incorporates not only the purchase stage, but also including previous and post buying stages. This way, these objectives are threefold: **first**, it aims to present the main topics discussed about compulsiveness where the focus is the consumer behavior. **Second**, it proposes a broader perspective to approach this topic by using Consumer Journey (Court et al., 2009; Lemon & Verhoef, 2016) framework, expanding the discussion to pre and post purchase stages, and **third** by proposing a research agenda with possible topics about compulsiveness that need further investigation in consumer behavior literature.

Compulsive consumption is a phenomenon that has been studied from various perspectives in the marketing literature, as a buying impulse (Rook, 1987), a compulsive buying behavior (CBB) (Faber, O’Guinn, & Krych, 1987; O’Guinn & Faber, 1989; Valence, d’Astous,

& Fortier, 1988), and a shopping addiction (Hirschman, 1992). Hirschman (1992) developed a more general theory to study compulsive consumption, beginning by defining five characteristics of impulsive buying: (1) sudden, spontaneous desire to act; (2) psychological conflict between buying and resisting; (3) consumers feeling out of control; (4) a lowering of utility-maximizing criteria for product evaluation; and (5) a disregard for negative consequences.

These characteristics highlight the complexity of compulsiveness in consumption, which can be magnified if we consider that compulsiveness has been extensively explored by other areas of research, such as psychology, addiction, and information technology (see, e.g., Lawrence et al., 2014; Maraz, Griffiths, & Demetrovics, 2016; Nataraajan & Goff, 1992). As one of the main objectives of this paper is to propose a research agenda using the consumer journey (Court et al, 2009; Lemon & Verhoef, 2016) framework in an attempt to discuss how compulsiveness is discussed in relation to the journey consumers take throughout in their lives, rather than only in the purchase stage, which (as will be discussed below) has been the focus of most extant consumer behavior literature.

The literature review conducted in this paper focuses on identifying the main topics discussed in relation to the three stages of consumption. I first present the methods used to select the published papers to be considered in this study. I then present the topics and discussions in the consumer behavior literature related to each of these three stages. Table 2 presents the main papers related to each topic in the prepurchase, purchase, and postpurchase stages of the consumer journey, with the objective of summarizing the literature review conducted.

From this analysis, I present three topics of compulsiveness that require further attention from researchers in consumer behavior: compulsive social networking site (SNS) usage, binge watching, and compulsive browsing. The first two topics are related to the postpurchase stage, where areas such as hoarding and game addiction have been widely studied (Claes, Müller, & Luyckx, 2016; Ladouceur, Sévigny, Blaszczynski, O'Connor, & Lavoie, 2003; Maycroft, 2008; McKinnon, Smith, & Keith Hunt, 1985; Rose & Dhandayudham, 2014)—though studies addressing the compulsive use of contemporary media, including social media and media streaming, are lacking. The third topic is related to the prepurchase stage, which consumer behavior researchers have previously identified as in need of more attention (Chen, Hsu, & Lin,

2010; Jiang, Luk, & Cardinali, 2018). This is the topic I choose to explore further and is addressed in the second and third papers of this dissertation.

2. Literature review

To select papers to analyze, I focused on papers published in peer-reviewed academic journals only. I decided to use the EBSCO database and Google Scholar, as these are two of the main databases used in academic research. I searched for articles using several keywords related to compulsive behavior, such as compulsive buying, shopping addiction, couponing, and hoarding, among others. Table 1 outlines the keywords used in this first stage that returned relevant articles to be explored. As the objective of this study is to address how compulsiveness has been discussed in the marketing and consumer behavior literatures, I excluded articles focused on treatments, and other medical-related research about compulsiveness and addiction. I identified 48 articles that were duplicates as they had been suggested based on more than one keyword (the most common case were articles that appeared for both compulsive buying and impulsive buying keywords, which could also be an indication that authors often treat these terms as synonymous). Ultimately, I found 808 articles about compulsiveness in peer-reviewed journals that addressed compulsiveness or addictive behavior in consumption. I did not impose published-date filters, and articles ranged from 1982 to 2019.

Table 1 List of keywords x quantity of papers found

Consumer Journey Stage	Keyword	Other areas	Consumer Behavior area	Total
Pre Purchase	Couponing	1	13	14
	Pre Purchase TOTAL	1	13	14
Purchase	Compulsive Buying	242	77	319
	Impulsive Buying	19	33	52
	Compulsive Shopping	43	4	47
	Shopping Addiction	30	7	37
	Purchase TOTAL	334	121	455
Post Purchase	Gaming Addiction	49	21	70
	Social Media Addiction	49	24	73
	Binge Eating	27	14	41
	Binge Consumption	14	20	34
	Hoarding Behavior	29	5	34
	Dating App	14	18	32
	Compulsive Hoarding	24	4	28
	Binge Watching	3	12	15
	Compulsive Gaming	9	3	12
	Post Purchase TOTAL	218	121	339
Total Geral		553	255	808

The next step was to separate the articles into marketing-, consumer behavior-, and culture-related journals, as opposed to other fields such as psychology, psychiatry, and neuroscience. I found 255 different articles about compulsiveness behavior in marketing or consumer behavior journals. From this list, I excluded 12 papers that were not published in a journal indexed by Scimago, used as a measure to assess the quality of academic journals, which left 243 papers.

The analysis of these articles consisted of reading their abstracts to verify the findings and constructs of each article, in order to obtain a list of articles to be included in the analysis stage. To filter the articles, I focused on my main objective: identify extant discussions on compulsiveness during the three stages of the consumer journey. The main filter I used was to select articles that included relevant discussions on topics pertaining to compulsiveness in the consumer journey. It is important to clarify that the objective of this paper was not to execute a literature review about compulsiveness in consumer behavior, since this purpose has already been accomplished in other papers (e.g., Gupta, 2013; Workman & Paper, 2010). Therefore, I

selected only papers that discussed relevant topics regarding compulsiveness. From the list of 243 articles, 42 served as the basis for this paper's discussion.

The following section first presents a conceptual discussion about impulsive buying, compulsive buying, and shopping addiction, as these concepts are part of the discussion on compulsiveness and it is important to demonstrate the interplay between them. I then briefly present the main concepts related to the consumer journey, which is the framework used in this paper, and outline the discussions in the literature regarding the three stages of the consumer journey. Finally, I propose an agenda for future research on compulsiveness, highlighting the topics that could be better explored in future studies.

2.1. Discussions about compulsiveness in the consumer journey

2.1.1. Impulsive buying, compulsive buying, and shopping addiction

What are the differences between impulsive buying, compulsive buying, and shopping addiction? Although this question may seem simple, the answer is rather complex. Rook (1987) stated that the narrow version of the concept of impulsive buying pertains to consumer purchasing that occurs without preliminary planning. Rook aimed to broaden this definition to something that “occurs when a consumer experiences a sudden, often powerful and persistent urge to buy something immediately. The impulse to buy is hedonically complex and may stimulate emotional conflict” (1987, p. 191). The continuous occurrence of impulsive buying may lead consumers to CBB, which was initially defined as an “inappropriate type of consumer behavior, excessive in itself, and obviously disturbing for the existence of individuals who seem to be prone to impulsive consumption” (Faber et al., 1987, p. 132). Darrat et al. (2016) discussed the differences between compulsive and impulsive buying, stating that the main difference is that latter is related mainly to unreflective and unplanned purchases, which may happen to anyone at any point of their consumption history, while compulsive buyers experience an “urge-to-buy continuum,” or “an extreme urge-to-buy.”

Faber et al.'s (1987) description of a compulsive shopper certainly resembles the situations that Rebecca Bloomwood, from the *Shopaholic* series, faces: someone who buys “identical sweaters in different colors because he simply ‘has to’ or because, ‘I felt good in it,’” (p. 132). This compulsive behavior then leads the consumer to experience social embarrassment, wherein “normal activities such as opening the mail or answering the phone

take on new meanings. For many compulsive shoppers, there is a constant fear of being confronted by another large bill, or angry creditor" (Faber et al., 1987, p. 132). These characteristics are similar to those pertaining to addictive behavior. Goodman's (1990, p. 1404) definition of addiction, which has been widely used in the literature, is a behavior that is "characterized by (1) recurrent failure to control the behavior (powerlessness) and (2) continuation of the behavior despite significant negative consequences (unmanageability)." Building on a similar way of thinking, Hirschman (1992) proposed a general theory to study compulsive consumption, defining five characteristics of impulsive buying: (1) sudden, spontaneous desire to act; (2) psychological conflict between buying and resisting; (3) consumers feeling out of control; (4) a lowering of utility-maximizing criteria for product evaluation; and (5) a disregard for negative consequences.

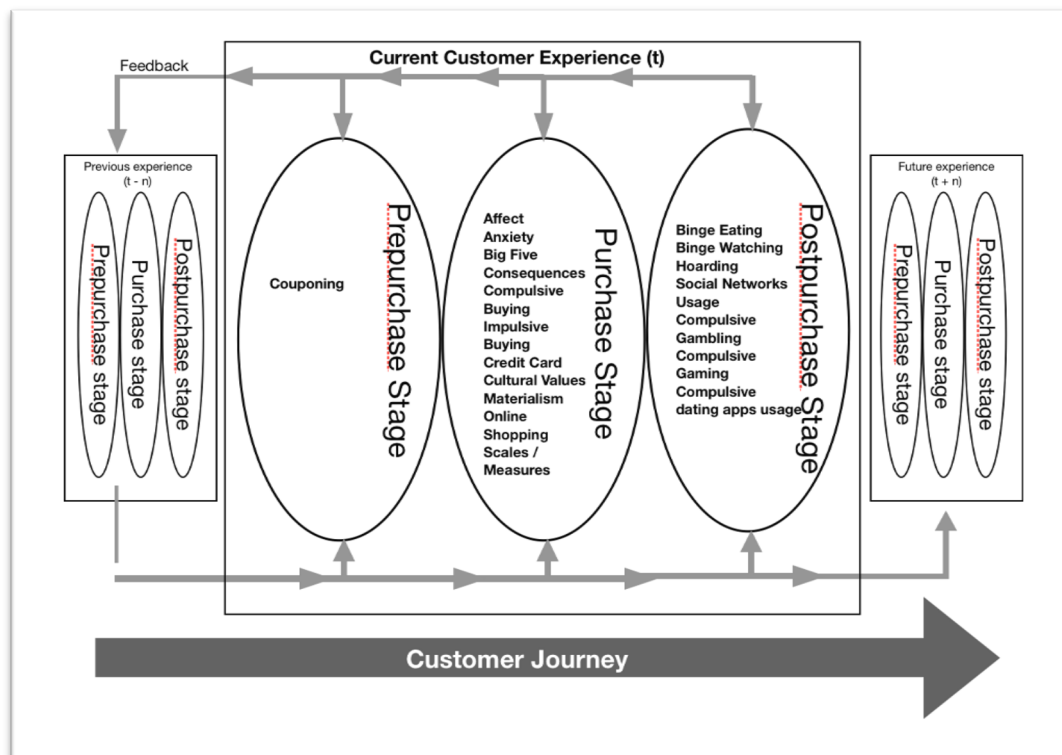
Hirschman (1992) suggested that there are two kinds of personality that engage in compulsive consumption: distressed users, who aim to compensate negative feelings, such as depression and anxiety; and sociopathic users, who look for gratification, with low levels of regret and guilt. She also highlighted that compulsive consumers often exhibit compulsiveness in other categories of products, and that when they are under restriction they tend to change from one addiction to another (e.g., someone that stops using drugs may start binge drinking or binge eating). Such consumers exhibit higher levels of compulsiveness in moments of stress (e.g., when starting a new job or going through a break up), and, when they are no longer consuming, are subject to a high chance of relapse and return to consumption when they face stressful events.

The concepts presented above highlight a range of concepts, which challenges the discussion of limits between impulsion, compulsion, and addiction in consumer behavior. Maccarrone-Eaglen and Schofield (2017) highlighted this variety of concepts in CBB, positing that CBB entails both compulsive, and there has been no agreement on where compulsiveness disorder may be placed. They highlighted the fact that some scholars have considered CBB as an impulse control disorder, since it is egosyntonic, consistent with the individual self-perception, and with a degree of rational response to external stimulus. Other scholars (García, 2007; Maraz et al., 2016a) have considered CBB as an OCD, given that it is egodystonic, and inconsistent with self-perception where consumers find a solution to their anxiety by engaging in compulsively buying.

2.1.2. The consumer journey

Recently, the buying process has been studied in light of the consumer journey framework created by Court et al. (2009). This framework has been discussed and used by both professionals (Richardson, 2010) and academics (Lemon & Verhoef, 2016) in the marketing field. The framework is a contemporary version of the classical model of the customer buying processes, where the authors propose that a focus on the journey the consumer takes to buy a product. This entails three main stages related to the consumer experience during the journey: (1) prepurchase, when consumers recognize their needs, search for information about the product or service, and ponder their options; (2) purchase, when consumers choose, order, and pay for their product or service; and (3) postpurchase, when consumers use, consume, and engage with the product or service, generate word-of-mouth, and discard the product or service. Using the consumer journey framework to assess CBB, we can explore how compulsiveness is discussed throughout these stages, which will provide a more precise and cohesive view of the discussion in the literature. From the analysis of the 42 selected papers, I placed the 22 topics about compulsiveness into 16 groups that can be organized into the three stages of the consumer journey. Figure 1 presents how these topics are grouped in the framework.

Figure 1 Topics discussed in relation to compulsiveness in the consumer journey framework



Source: Adapted from Lemon & Verhoef, 2016.

3. Discussions about compulsiveness in the prepurchase stage

There are several interesting aspects of the prepurchase stage. With the advancement of electronic commerce, consumers are able to engage in multiple ways to research a product or service. According to Statista (2018), in 2017 the revenue from electronic commerce was U\$ 2.3 trillion worldwide, and it represented an increase of 76% of revenue in 2014 (U\$ 1.3 trillion); thus, this type of commerce is growing rapidly. In addition, there are more than 2 billion digital consumers (people who have bought something online) worldwide, which represents almost one-third of the world's population (Statista, 2018). Euromonitor International (2017) has stated that consumers are buying more consciously, evaluating the choices they have before shopping and prioritizing options that save time, such as buying products online.

Despite this, however, I could only find one topic discussed in relation to the prepurchase stage regarding compulsiveness: couponing. Couponing is when a savvy shopper, defined as a consumer that becomes excited about getting a bargain (Schindler, 1989), acts compulsively by collecting and using coupons to get discounts (Bawa & Shoemaker, 1987). This habit has characteristics of addictive behaviors and has even been the subject of reality TV shows, such as *Extreme Couponing* from TLC. The coupons collected also include electronic coupons that can be used at both brick-and-mortar and online retail stores (Ieva et al., 2016; Dickinger & Kleinjnen, 2008). Couponing in itself is considered a compulsive type of consumption as it is related to the act of looking for bargains and opportunities. With the advancement of electronic commerce (Dickinger & Kleinjnen, 2008; Ieva et al., 2016), several studies have explored whether electronic coupons and mobile electronic coupons have the same effect on consumers. With the advancement of browsing tools, I expected that consumers would also engage in some type of compulsive browsing or compulsive searching, but I was unable to identify research on such consumer behavior, which might represent a gap in the literature on compulsiveness.

4. Discussions about compulsiveness in the purchase stage

As the purchase stage entails the act of buying per se—the decisive moment at which consumers order, choose and pay—discussions about compulsiveness have primarily centered

around this stage. The main topics discussed are related to impulsive buying, compulsive buying, and shopping addiction, but there are other topics related to the antecedents and consequences of this compulsiveness behavior, and the demographics of consumers that engage in it. In the consumer behavior literature, conceptual papers about compulsiveness began to emerge from the late 1980s and early 1990s, with research from Rook (1987), Faber et al. (1987), O'Guinn and Faber (1989), and Hirschmann (1992). There are several streams of research on the purchase stage, including the definition and use of scales (Claes et al., 2010; Valence et al., 1988), and demographic (Hassay & Smith, 1996; Johnson & Attmann, 2009; O'Guinn & Faber, 1989), cross-cultural (Clark & Calleja, 2008; Trautmann & Johnson, 2007; Wang & Yang, 2008) and other aspects of compulsive and addiction behavior related to the purchase stage. Below, I briefly summarize how compulsiveness has been discussed in relation to each topic.

- **Affect:** Researchers have studied how positive and negative sentiments and moods relate to compulsive behavior. Flight, Rountree, and Beatty (2012) analyzed how impulsiveness and compulsiveness behave differently when affect-arousing stimuli are present, and found that positive sentiment mediates the relation between impulsive buying traits and the urge to buy, while negative sentiment mediates the relation between compulsive buying traits and the urge to buy. Rose and Segrist (2014) also studied the impact of negative and positive mood in compulsive buyers, and found that when in urgency situations, where individuals act rashly, both negative and positive moods result in compulsive buying episodes. This suggests that in urgent situations even a positive mood is a risk that compulsive buying may drive consumers' purchase decisions.
- **Anxiety:** Research regarding anxiety and compulsive buying has discussed how impulsive and compulsive aspects of individuals interplay with anxiety, possibly altering their CBB. Darrat, Darrat, and Amyx (2016) studied how impulsiveness and compulsiveness differ in their relation with consumers' anxiety and escapism, highlighting that the compulsiveness and impulsiveness traits have different impacts on consumer behavior. The authors suggested a hybrid perspective of these traits, where impulsiveness is connected with desire, a positive affective trait, while compulsiveness is connected with willpower and negative affect. Together, these different traits behave in a complementary way: impulsiveness increases anxiety in consumers, and consumer escapism seems to deter the conversion of anxiety into compulsive buying. Gallagher,

Watt, Weaver, and Murphy (2017) found that anxiety predicts the tendency to buy compulsively, while depression is related to postpurchase guilt. When experiencing negative affect, and anxiety related to physical and cognitive concerns, CBB is enhanced, but when the concerns are social there is no significant effect.

- **Big Five:** Researchers interested in discussing the Big Five personality traits (neuroticism, extraversion, openness, agreeableness, and conscientiousness) have sought to verify how these different traits are connected with CBB. Mueller et al. (2010) analyzed the profile of 68 compulsive buyers seeking treatment, and found two groups of individuals, one that rated high on the Big Five personality traits, while the other group rated high only on neuroticism. This group of people showed a higher severity of compulsive buying, lower degree of control over symptoms, and greater anxiety compared to members of the first group. Consistent with these findings, Otero-López and Villardefrancos Pol (2013) found that individuals that rated higher in compulsive buying also rated higher in neuroticism, suggesting that this facet may be the more relevant of the Big Five personality traits.
- **Consequences:** Some researchers have focused on empirically verifying the consequences of CBB. Zhang, Brook, Leukefeld, De La Rosa, and Brook (2017) performed a longitudinal study with 543 participants, assessing and following their lives from childhood to adulthood. They found a significant association between compulsive buying and quality of life, suggesting that there is a significant monetary cost that impacts the lives of compulsive buyers. Although the measures used in their study did not indicate specifically that individuals with compulsiveness have a lower quality of life due to their compulsiveness, as it was not possible to isolate this effect in such a longitudinal study, the regression analysis showed a tendency for compulsive buyers to have lower income and lower quality of life compared to the other individuals analyzed. Jung and Yi (2016) concluded that, in addition to compulsive buyers, there are also individuals that present a moderate compulsive behavior, with buying lapses that may also be detrimental to their financial lives. They conducted a survey of 809 individuals with buying-lapse episodes and identified this intermediate group that may have been overlooked by researchers.
- **Cultural influences:** Studies that have analyzed cultural influences in compulsiveness have aimed to verify how cultural aspects influence impulsive buying behavior in consumers. For example, Kacen and Lee (2002) studied how intercultural and interpersonal values impact the impulsive buying trait by analyzing differences in

impulsive buying behavior, taking into consideration individualistic versus collectivistic cultures, and independent and interdependent personality traits, by administrating a study with individuals from four different countries (Australia and the US—Caucasian, individualistic; Malaysia and Singapore—Asian, collectivistic). They obtained valid responses from 938 individuals across two studies, finding that individuals from individualistic countries present higher impulsive buying behavior than do individuals in collectivistic countries. One interesting finding of this study is that for individuals from collectivistic countries, the independent personality trait did not impact their impulsive buying behavior, but for individuals from individualistic countries, their personal level of independence led to greater impulsive buying behavior. In a similar manner, Zhang, Howell, and Howell (2016) studied whether living in a more upscale neighborhood led individuals to engage in a more maladaptive type of consumption. They used impulsive buying behavior, materialistic values, and saving behavior as variables, and found that the wealth present around consumers did indeed increase their materialistic value, and engage in more impulsive buying and less savings behavior, especially if the neighborhood represented an increase in the consumers' consumption standards.

- **Credit card misuse:** Another topic of research has been the misuse of credit cards, and compulsive buying. Palan, Morrow, Trapp, and Blackburn (2011) surveyed 260 American students to analyze whether self-esteem, risk-taking, and power-prestige relate to credit card misuse and compulsive buying. They found that only power-prestige—defined as the use of money to influence and impress others, symbolizing success—was directly connected to compulsive buying. They also found that credit card misuse is directly related to compulsive buying, and the effect of power-prestige on CBB is mediated by credit card misuse.
- **Scales:** An area that has been constantly evolving in compulsiveness research is the development and analysis of scales to assess CBB. In 1992, Faber and O'Guinn proposed a scale to help identify CBB amongst a population. The scale resulted from in-depth analysis of compulsive behavior in clinical conditions, which used a survey with 388 compulsive buyers and 292 noncompulsive buyers for validation. A year later, Edwards (1993) proposed a different, more complex scale that rates individuals regarding the degree to which they are noncompulsive, recreational, compulsive, or addicted, grouping item into five factors: tendency to spend, drive to spend, feeling joy about shopping, dysfunctional spending, and post-purchase guilt. In 2008, Manolis,

Roberts, and Kashyap compared these scales, comparing the studies that have used them to assess compulsive buying. The authors concluded that the scales assess separate constructs or different dimensions of compulsive buying. Ridgway, Kukar-Kinney, and Monroe (2008) proposed an expanded scale for compulsive buyers, including both impulse control and obsessive-compulsive dimensions, and also excluded consequence effects and income-related items, resulting in a broader instrument to assess compulsive behavior.

- **Materialism:** Materialism has often been used in compulsive behavior studies, sometimes as a construct used in the analysis, but often as the central focus. Otero-López, Pol, Bolaño, and Mariño (2011) studied 469 women in Spain and concluded that life satisfaction influences two dimensions of materialism (facets of success and happiness), which in turn are positively related to addictive buying behavior. Reeves, Baker, and Truluck (2012) found that life dissatisfaction is an underlying motive to buy, as a response to the search for an ideal self. They also found that materialism and compulsive buying are correlated with celebrity worship, and these three concepts—celebrity worship, compulsive buying, and materialism—are significantly related to lower levels of well-being. Focusing on adolescents, Islam, Wei, Sheikh, Hameed, and Azam (2017) collected data from a survey of 219 undergraduate students from Pakistan and concluded that three facets of materialism are indeed significant antecedents of materialism: the influence of peers, celebrity endorsement, and TV advertisement. These three antecedents influence materialism, which influences compulsive buying.

5. Discussions about compulsiveness in the postpurchase stage

This stage in the consumer journey comprises additional topics related to compulsiveness. There are two main research streams: binge consumption and hoarding. Binge consumption has been investigated in the medical literature, mostly in relation to alcohol and other substance abuse. As I aimed to discuss compulsive consumption in this article I opted to consider the binge-eating stream of research as representative of binge consumption of substances, as this topic has the closest connection with discussions in the marketing literature. Binge eating can be defined as the consumption of a large amount of food without control (Faber, Christenson, de Zwaan, & Mitchell, 1995; Lee, Lennon, & Rudd, 2000; Trautmann & Johnson, 2007), and has been vastly studied as a way to illustrate consumers' addiction (Faber

et al., 1995). Besides the consumption of substances, other types of binge consumption can be observed with the latest advancement of technologies. One example is binge watching, a phenomenon that has also been called “the Netflix effect” (Jenner, 2016; Matrix, 2014); this is the binge consumption of content from a video streaming provider. Binge watching is similar to CBB as it relates to the consumption of episodes of a certain TV show or series in a compulsive, continuous way. Samuel (2017) explored contemporary changes in television-viewing habits and concluded that the advent of online streaming has disrupted the television-viewing experience. Likewise, Conlin, Billings, and Averset (2016) discussed the phenomenon of FOMO (fear of missing out), which is a form of apprehension that a viewer may feel when they do not watch available episodes compulsively. Flayale, Maurage and Billeux (2017) performed a focus group analysis to investigate the binge-watching phenomenon, finding that participants recognized themselves as addicted to binge-watching content streamed online.

Compulsive gaming could also be classified as a form of binge consumption, since it relates to the act of gaming without control (Kim et al., 2017). Compulsive gaming has been discussed in marketing and psychology literature (Han et al., 2016, Hellman et al., 2013, Ladouceur et al., 2003; Mahajan & Muller, 1998), as it relates to addiction behavior; like compulsive versus addicted buyers, it is possible that there is a distinction between compulsive and addictive gaming. From what I could find, the results on compulsive gaming are very similar to those found in addiction-related studies. Hellman et al. (2013) performed a cross-disciplinary theoretical study to assess whether compulsive gaming can be considered an addiction, concluding that, indeed, there are correlations between compulsive gaming and the core concepts of addiction behavior, though this similarity must be parsimoniously addressed as there is a difference in magnitude with other types of addiction (e.g., drug addiction). Other researches about compulsive gambling have treated it as an addiction behavior; for instance, Kim et al. (2017) characterized Internet gaming disorder (IGD) as a loss of control and preoccupation with gaming via repetitive behavior, and found connections between IGD with OCD. Han et al. (2016) found a link between excessive gaming behavior and depression.

Another type of binge consumption relates to the advancement of social media use. According to WeAreSocial (2018) in 2018 there were over 3 billion active users in social media in the world—almost half the population—with people spending, on average, more than two hours daily on social media, but only in countries such as the US, Brazil, and Mexico. I was able to identify from the literature two types of social media binge consumption: social media

addiction and dating apps addiction. Regarding social media addiction, I found that research has related more to addictive components of social media usage. Neumann (1998) discussed the possibilities of addiction to computer usage, proposing that, in addition to Internet gambling, other areas could lead to addiction-related behaviors in consumers, such as online gaming, browsing for products, and chat rooms. At the time of the study the author could not predict that chat rooms would evolve into SNSs, and therefore generate addictive behavior usage in this form; however, almost 20 years later, Hormes, Kearns, and Timko (2014) concluded that SNS use is potentially addictive, stating that SNS use seems to arise as part of a cluster of symptoms of poor emotion-regulation skills that resembles those found in addictive behavior. Turel and Osatuyi (2017) discussed the influence of peers in promoting compulsive use of SNS, and Sharif and Khanekharab (2017) analyzed whether people with identity confusion that are compulsive users of SNS are more prone to engage in online compulsive buying; both studies found that indeed that is a connection of adolescence, stage of life where identity confusion is more present, with online compulsive buying. A more specific type of social media app is the dating app, which is a geosocial networking application that connects users to one other (Shapiro et al., 2017). Research on dating apps usage has usually been related to sexual behavior, such as condom use, nonconsensual sexual relationships, and relationship expectancies, divided by sexual preferences (Tang, 2017; Griffin, Canevello, & McAnulty, 2018). Such studies are also fairly new—I was unable to find research about addictive behavior on dating apps, such as Tinder or Grindr.

Hoarding refers to the acquisition of, and failure to discard, large numbers of possessions. It has been identified as an addictive behavior and has been largely studied in both psychology and consumer behavior (Claes et al., 2016; Lawrence, Ciorciari, & Kyrios, 2014; Maycroft, 2008; McKinnon et al., 1985; Shoham et al., 2017). Similar to couponing, compulsive behavior in hoarding has attracted media attention via specific TV shows about this compulsive behavior, such as *Hoarders: Buried Alive*, and the Bravo documentary *Hoarders*. Several studies have addressed hoarding as a compulsive behavior, and most have treated compulsive hoarders as addictive individuals. The majority of research has considered the age at which the problem started (Grisham et al., 2006), problems with memory that might be related to hoarding behavior (Hartl et al., 2004), or the nature of this behavior—for instance, Coles et al. (2003) investigated the hoarding behavior of more than 500 college students in order to find the origin of their hoarding behavior.

6. Summary of topics

The 22 topics discussed in the previous sections represent the current discussion about compulsiveness in the consumer journey. Table 2 summarizes these topics, with detailed information about the papers I consider to be representative of discussions into each topic.

Table 2 List of articles chosen to represent discussions about compulsiveness in consumer journey

CJ stage	Topic	Year	Authors	Method	Sample	Country	Main constructs
Postpurchase	Binge watching	2018	Shim, H., & Kim, K. J.	focus group interview with 23 binge watchers resulted in a list of 19 sentences; applied online survey with 785 respondents that self-affirmed being watched a show. PCA (principal component analysis)	785	South Korea	sensation seeking need for cognition binge watching
Purchase	Affect	2014	Flight, R. Rountree, M. M. Beatty, S.E.	survey and analysis of shopping diaries	469	US	impulsive buying compulsive buying affect (positive and negative sentiments)
Purchase	Affect	2014	Rose, P. Segrist, D.J.	Survey with scales and multiple regression analysis	514	US	positive mood negative mood urgency
Purchase	Anxiety	2016	Darrat, Aadel A., Mahmoud A. Darrat, and Douglas Amyx	Survey with Faber and O'Guinn's screener for compulsive buying, Rook and Fisher (1995) impulsiveness buying scale, Zung's (1971) self-rating anxiety scale, and O'Guinn and Faber (1989) escapism scale.	143	US	anxiety impulsiveness compulsiveness escapism
Purchase	Anxiety	2017	Gallagher, C. E., Watt, M. C., Weaver, A. D., & Murphy, K. A.	Survey with 2 CB scale, Anxiety stress scale, Anxiety sensitivity index	437	Canada	anxiety post purchase guilt depression negative affect
Purchase	Big five	2010	Mueller, A., Claes, L., Mitchell, J. E., Wonderlich, S. A., Crosby, R. D. & De Zwann, M	Survey with individuals that went through treatment for compulsive buying. Before and after treatment analysis. They analyzed 68 individuals who looked for CB treatment and after 12 weeks of 1x/week 90 min group session, they assessed the individuals for CB scales and Big five personality traits.	68	Germany	big five personality model compulsive buying
Purchase	Big five	2013	Otero-López, J. M., & Pol, E. V.	Survey with CB Scale, Revised NEO-Personality Inventory (NEO-PI-R)	1365	Spain	five factor model of personality
Purchase	Conceptual	1987	Rook, D. W.	Interviews and open questions self completed questionnaires	133	US	impulsive buying
Purchase	Conceptual	1992	Hirschmann, E.	Qualitative, phenomenological study, juxtaposing concepts discussed in the drug addiction research with concepts related to compulsive and impulsive consumption, and interviewed 35 self-	35	US	compulsive consumption

				declared drug addicts, and attended 2 stages of Narcotics Anonymous.			shopping addiction
Purchase	Conceptual	1989	O'Guinn,T., Faber, R.J.	Observation of therapy groups (50 participants), letters from compulsive buyers, 5 interviews, and survey with 386 respondents.	386	US	compulsivity self-esteem materialism anxiety fantasizing sense of loss of control
Purchase	Consequences	2017	Zhang, C., Brook, J. S., Leukefeld, C. G., De La Rosa, M., & Brook, D. W.	Longitudinal study with 2 communities in NY, data collected through interviews with the use of scales to assess CM, quality of life, and other items. They use the concept of mid-life over 40 (mean age was 43 years old). They collected data from 1983 - 2013 in 8 different time stamps. They used the data from T7 (when mean age was 37) and T8 (mean age 43) to assess the impact of CB in subjects during their mid-life	548	US	compulsive buying quality of life materialism
Purchase	Consequences	2016	Jung, J., & Yi, S.	Online survey with 809 individuals who frequently engage in buying lapses	809	South Korea	materialism narcissism compulsive buying moderate-risk buying
Purchase	Credit Card Misuse	2011	Palan, K. M., Morrow, P. C., Trapp, A., & Blackburn, V.	Online survey with college students, assessing compulsive buying, power prestige, self-esteem and risk-taking through scales.	260	US	compulsive buying power prestige self esteem risk taking
Purchase	Cultural and Social influences	2016	Zhang, J. W., Howell, R. T., & Howell, C. J.	survey with scales for Impulsive Buying, Materialism, Money Ethics, Money Conservation	2702	US	materialism socioeconomic status impulsive buying
Purchase	Cultural and Social influences	2002	Kacen, J.J.,& Lee, J.A.	analyzing differences of impulsive buying behavior taking into consideration the individualistic x collectivistic cultures, and independent and interdependent personality traits, by administering a study with individuals from 4 different countries (Australia and the United States – caucasian, individualistic; Malaysia, and Singapore, asian, collectivistic).	938	US Australia Malaysia Singapore	impulsive buying affect individualistic x collectivistic independent x interdependent

				Amongst the 2 studies, they obtained valid responses from 938 individuals.			
Purchase	Depression	2013	Kyrios, M., McQueen, P., & Moulding, R.	experiment with 35 subjects (18 compulsive buying, 17 control group) where depressed mood was used as a stimulus to verify if coping would lead compulsive buyers to be more attracted to items	35	Australia	mood (depressed) compulsive buying
Purchase	Depression	2014	Müller, A., Claes, L., Georgiadou, E., Möllenkamp, M., Voth, E. M., Faber, R.J. & De Zwann, M.	survey with scales with clinical patients with CB	102	Germany	materialism depression compulsive buying
Purchase	Family Structure	2013	Baker, A. M., Moschis, G. P., Benmoyal-Bouzaglo, S., & Pizzutti dos Santos, C.	Cross cultural study, survey with Confirmatory factor analysis	152 (US) 163 (France) 177 (Brazil)	US, France, Brazil	the course of life paradigm compulsive buying
Purchase	Gender	2011	Mueller, A., Claes, L., Mitchell, J. E., Faber, R. J., Fischer, J., & de Zwann, M.	Survey with Compulsive Buying Scale (CBS), the 8-item Patient Health Questionnaire depression scale, the 11-item Material Values Scale, the Behavioral Inhibition System and Behavioral Activation System Scale (BIS/BAS), and the Effortful Control Scale of the Adult Temperament Questionnaire–Short Form.	414	Germany, Belgium	materialism compulsive buying scales
Purchase	Goals	2015	Otero-López, J. M., & Villardefrancos, E.	Survey with CB scale, and Aspiration Index by Grouzet et al. (2005) including eleven life aspirations: four extrinsic life aspirations (financial success, image, popularity, and conformity), five intrinsic goals (self-acceptance, affiliation, community feeling, physical health, and safety), and the aspirations of hedonism and spirituality.	2159	Spain	intrinsic goals extrinsic goals compulsive buying
Purchase	Impulsiveness	2008	Billieux, J., Rochat, L., Rebetz, M. M. L., & Van der Linden, M.	Survey with questionnaire using scales	150	Swiss	impulsive buying compulsive buying urgency sensation seeking lack of perseverance lack of premeditation

Purchase	Impulsiveness	2013	Yi, S.	Survey with latent profile analysis (clusters) found three groups of compulsive buyers: compulsive + impulsive, impulsive, and ordinary buyers.	445	Canada	buying compulsivity buying impulsivity materialism shame proneness guilt proneness trait self control proneness
Purchase	Materialism	2011	Otero-López, J. M., Pol, E. V., Bolaño, C. C., & Mariño, M. J. S.	Survey with German Addictive Buying Scale, Satisfaction of Life Scale, and materialism Value Scale	469	Spain	materialism addictive buying
Purchase	Materialism	2012	Reeves, R. A., Baker, G. A., & Truluck, C. S.	Survey with 171 students, using scales to assess the relationship amongst the concepts. Empty-self and absorption-addiction theory.	171	US	celebrity worship materialism compulsive buying well-being
Purchase	Materialism	2017	Islam, T., Wei, J., Sheikh, Z., Hameed, Z., & Azam, R. I.	Survey with CFA (confirmatory factor analysis) and PLS (partial least square), using scales	219	Pakistan	materialism compulsive buying celebrity endorsement peer group tv advertisement
Purchase	Mindfulness	2017	Park, H. J., & Dhandra, T. K.	Survey with Cognitive and Affective Mindfulness Scale–Revised and Wong and Law Emotional Intelligence Scale	319	India	mindfulness disposition impulsive buying
Purchase	Online shopping	2014	Duroy, D., Gorse, P., & Lejoyeux, M.	Survey with self-questionnaires, to screen online compulsive buying, internet addiction, alcohol and tobacco use disorders, to rate frequency of online purchase by private-sale websites	200	France	online compulsive buying compulsive buying
Purchase	Psychological	1995	Rook, D. W., & Fisher, R. J.	Study 1 - scenario description, survey with impulsive buying scale. Consumer trait, purchase decision, and normative evaluation measures collected. Study 2 - Survey in the mall	212 (study 1) 104 (study 2)	US	impulsive buying

Purchase	Scales	1992	Faber, R. J., & O'guinn, T. C.	Development of a scale to identify compulsive buyers, with data from 388 self-identified compulsive buyers x 292 control group, mail survey. Authors developed a scale that was largely used and discussed by researchers.	680	US	compulsive buying
Purchase	Scales	1993	Edwards, E.	Survey with self-identified compulsive buyers and control population, 29 items that load into 5 factors: tendency to spend, drive to spend, feeling joy about shopping, dysfunctional spending, and post-purchase guilt	205	US	compulsive buying tendency to spend guilt joy
Purchase	Scales	2008	Manolis, C., Roberts, J. A., & Kashyap, V.	Compared studies that used Faber & O'Guinn and Edwards scale, discussing the procedures and results of studies using these scales, and suggest that these scales assess the concept of compulsive buying differently.	-	-	compulsive buying scales
Purchase	Scales	2008	Ridgway, N. M., Kukar-Kinney, M., & Monroe, K. B.	Exploratory factor analysis, Confirmatory factor analysis to generate a proposed scale, two surveys to validate these scales. The expanded version of the scale includes impulsive-control and obsessive-compulsive dimensions.	352 (study 1) 555 (study 2) 309 (study 3)	US	compulsive buying impulsive buying

7. Proposed research agenda

In literature research on compulsiveness in the consumer journey to date, there are several research streams within the marketing and consumer behavior literature. Adopting the consumer journey framework to understand how this discussion is being conducted in the consumer behavior literature allowed me to observe how compulsiveness may manifest during the consumption journey. Four main areas of research are suggested as in need of future research about compulsiveness in the consumer journey: one in the Prepurchase stage, and three on the Postpurchase stage.

7.1. Prepurchase

In prepurchase stage, I suggest exploring binge consumption characteristics that arise during the searching or browsing stage of purchasing. There is some extant research on binge watching, a phenomenon that has arisen due to the presence of streaming services such as Netflix, where people spend so much time looking for options to watch before making their choice that they end up watching nothing at all. I think that this effect could also occur in the browsing stage of other types of consumption, ranging from services, such as travel-/vacation-related services (e.g., airline tickets, hotel bookings), to common products (e.g., clothes, books), to specialized products, such as collectible items, and also house hunting (e.g., renting or buying an apartment). I was unable to find a keyword related to this type of compulsion in browsing, so I suggest a term that is related to compulsive browsing, such as “binge searching” or “compulsive browsing”.

Anecdotal evidences have shown that companies are investing in innovation to improve consumers browsing experience. Westwing and Nuji are global companies that offer consumers websites that mimic the experience of reading magazines, a curated way of offering products, where consumers access products through their browsing behavior. Curation is a new topic in marketing literature that is being discussed (Mikko Villi, Johanna Moisander, 2012; Morris & Powers, 2015; Smits & Nikdel, 2019) as a solution to choice overload (Scheibehenne, Greifeneder, & Todd, 2010) and it is also an interesting topic to research about compulsiveness. Can curation reduce compulsiveness, as it diminishes the options consumer have access to? Or

is the other way around: can consumers become compulsive about accessing curated content, and engage in compulsive browsing behavior?

Electronic couponing is a topic that has been somewhat discussed in literature, but has been little explored (Dickinger & Kleijnjen, 2008; Ieva et al., 2016), leaving room for improvement, especially if it is considered the dynamics of electronic retail that incorporates virtual world technology (Hassouneh & Brengman, 2015).

Another topic that can be explored in prepurchase stage that needs further attention is social media browsing. Social media advertising is being discussed in consumer behavior literature (Batra & Keller, 2016; Boateng & Okoe, 2015; Touchette, Schanski, & Lee, 2015; Van-Tien Dao, Nhat Hanh Le, Ming-Sung Cheng, & Chao Chen, 2014) but few considerations are about how this type of advertisement induces consumers to browse compulsively online, to buy impulsively, and also how the presence of advertisement and brands communication contributes to social media addiction use. These are also relevant topics to be further discussed in consumer behavior literature.

7.2. Postpurchase

SNS addiction needs further investigation as it is a phenomenon that has been exponentially growing with the rapid advancement of social media, and the advent of social media sites such as Twitter and Instagram (Kuss & Griffiths, 2017). It is especially important to discuss the impact of compulsive and addictive use of SNS on consumer behavior. Specific constructs have been discussed in social networks literature, such as nomophobia that is the fear of being without a mobile device (Kuss & Griffiths, 2017), and FOMO, fear of missing out, a construct that incentives consumers to keep accessing and reading information, to keep on what is going on (Tomczyk & Selmanagic-Lizde, 2018). The presence of FOMO, although relatively new in marketing literature, is accompanied with its counterpoint JOMO, the joy of missing out (Aranda & Baig, 2018; Crook, 2014), as a response to a constant need of being connected and aware. It is possible to suggest research questions about the relationship of these concepts with compulsive consumption: is nomophobia present in compulsive and impulsive buyers? Could FOMO incentives compulsiveness in consumers in which stage of the consumer journey? Would JOMO incentive compulsive and impulsive consumers to control their compulsive buying behavior?

One other area that needs further research about compulsiveness is dating apps addiction. Addiction to this type of app has been studied mostly in the psychology and sociology fields (Kircaburun & Griffiths, 2018b; Orosz et al., 2016), but this behavior may be influenced by compulsiveness, as consumers that have this personality trait may use it dating apps compulsively, possibly leading them to negative experiences. Fantasizing and self-esteem are concepts that are part of the discussions in dating apps usage (Kircaburun & Griffiths, 2018b; Orosz et al., 2016; Van De Wiele & Tong, 2014), and also the difficulties of abandoning the use of these apps (Brubaker, Ananny, & Crawford, 2016). As examples of research questions related to this topic, I suggested: how compulsiveness interplay with self-esteem in the usage of dating apps? Consumers that are impulsive, behave impulsively when using dating apps?

The binge-watching effect, also known as the Netflix effect, also needs more attention from researchers, as it is directly related to the streaming of media, which is changing the way consumers access and watch movies and series. By releasing all episodes at once, streaming services such as Amazon, Netflix, and Fox allow consumers to decide when to view all episodes of their favorite series, which often results in “marathons,” or binge watching, when consumers watch a whole season in one or two days (dedicating many hours of their time thereto). Such marathon/binge-watching behavior is stimulated and also expected from consumers. It has been studied in relation to several areas, but I believe that it needs to be further explored by academics in marketing and consumer behavior to better understand its impact in marketplace. Is there a relationship with binge watching and binge eating? Does one incentive the other? Does binge watching has a spillover effect on consumers’ consumption of products related to what has been binge watched? Does binge watch affect consumers’ perception of other media consumption practices?

7.3. Discussion and limitation of this research

As it was discussed in this paper, compulsiveness is a topic that has been extensively discussed in several areas of research, including marketing and consumer behavior literature. Most of the research is focused on the purchase stage, where the buying decision takes place. This paper used the consumer journey framework as a way to discuss compulsiveness in consumer behavior and marketing literature from a broader perspective, including behaviors related to the other stages of consumption: prepurchase and postpurchase. This framework was valid because it clearly shows that prepurchase and postpurchase stages offer compelling areas of research about compulsiveness. With the exception of hoarding, which has been extensively discussed in consumer behavior and psychology literature, all the other topics discussed about compulsiveness in prepurchase and postpurchase stage can be better explored. Table 3 summarizes the suggested research questions for the four topics identified as components of a research agenda about compulsiveness: compulsive browsing, binge watching, SNS addiction, and dating app usage.

Table 3 Research questions proposed for compulsiveness in the consumer journey

Consumer Journey Stage	Topic	Suggested research question
Prepurchase	Compulsive browsing	The offer of a more pleasant and content-rich online browsing experience improves consumers compulsive behavior?
	Electronic couponing	Does online browsing for coupons and discounts incentive compulsive buying behavior?
	Social media advertisement	Would social media advertisement lead consumers to improve their compulsive behavior, and compulsive use of social media?
	Curated content	The offer of curated content can be a solution to consumers that feel overwhelmed by the options offered in electronic commerce?
	Social media browsing	Does the use of social media as an advertisement channel incentives consumers to compulsive browsing behavior or buying behavior?
Postpurchase	SNS addiction	is nomophobia present in compulsive and impulsive buyers?
	SNS addiction	Would joy of missing out (JOMO) incentive compulsive and impulsive consumers to control their compulsive buying behavior?
	Dating apps usage	Consumers that are impulsive, behave impulsively when using dating apps?
	Binge Watching	Is there a relationship with binge watching and binge eating? Does one incentive the other?
	Binge wating	Does binge watching has a spillover effect on consumers' consumption of products related to what has been binge watched?

This is a theoretical research that aimed to look at the literature with a clear objective in mind: identifying the topics discussed about compulsiveness that are relevant and in need of further research in consumer behavior literature. The objective of this paper was not to

perform an analytical literature review, comparing the constructs and juxtaposing topics about compulsiveness that contradict or complement each other in the discussions about compulsiveness in consumer behavior literature. Neither the objective was to construct a framework with all the constructs, dimensions, and outcomes of compulsive behavior. Other researches have focused on this kind of theoretical construction (for examples, please see Chris Manolis & Roberts, 2008; Maraz, Griffiths, & Demetrovics, 2016b; Otero-López & Villardefrancos, 2015). The goal of this discussion is to adopt a broader perspective of the discussions about compulsiveness, and propose topics for a research agenda, and suggested research questions to be used by academic researchers.

CHAPTER 3

Article 2 - We Need to Talk About Browsing: A Conceptual Definition of Consumer Online Browsing

1. Introduction

In the previous section of this dissertation, I listed compulsive browsing as a topic that requires further research, as it has not been clearly defined in the consumer behavior literature, nor discussed as a distinct concept.

The main activity of browsing is looking around (Bloch & Richins, 1983), scanning through available options (Wilson, 2002). Consumers scan the available options for fun, to explore novelties or offers on a product they are interested in, or just to be better informed about what is going on in the market. To obtain a clear picture of what I call COB behavior, a few examples of what does and does not constitute COB are given, as follows. When a consumer is looking at their feed on a social media app, such as Instagram, and they see an ad for a product, click the ad, and start browsing the website, looking for information about the product and possibly looking at other products, or move to look at other websites for more information about that or similar products, this qualifies as COB. Likewise, if a consumer receives an email informing them that a store is having a sale, and they visit the website to look at what is on sale, they are COB. This also applies to consumers who visit Amazon to check the month's best-selling books or visit Wine.com to find new wines that have been released in their favorite stores. Thus, whenever there is an exploratory, entertainment, or informational reason (P. Bloch, Sherrell, & Ridgway, 1986; Moe, 2003a; Rowley, 2001) driving a consumer to look around a website, without a clear intention to purchase a specific product, COB is likely to occur.

On the other hand, when a consumer reads something online, an ad pops up about, for instance, car insurance, and they are reminded that their policy is about to expire, leading them to click and compare insurance providers, they are not COB. Rather, such behavior is characteristic of a direct buying (DB) search (Moe, 2003a), where the consumer searches specific products for which they have high purchase intention, and select from several options

to make the purchase. Such searches are goal-directed (Dames, Hirschfeld, Sackmann, Thielsch, 2019; Moe, 2003b). Similarly, a consumer who is on social media, sees a post about a topic they are interested in, and then clicks on the link to a blog or news website, where there is only information—about a topic, or even about a product or a brand—such that purchase is not possible, this consumer is not COB. Instead, they are searching for information (Choo et al., 1999; Hider, 2006).

Much anecdotal evidence has suggested that COB has managerial implications. Indeed, the time consumers spend online has been on the rise (We are Social, 2019). The average American consumer spends 24 hours per week, connected online (Condliffe, 2018) — searching for information, checking email and social media, or simply “looking around.” Not surprisingly, search ads are responsible for almost half of the digital marketing budget in US companies, with investments that account for more than US\$ 50 billion annually in US companies alone (Forrester Research, 2017). Hence, the importance of better understanding when and how to best target consumers with particular content and messages is difficult to overestimate. For instance, a relevant question is whether brand communications are more effective when they are encountered by consumers who are preoccupied with finding a particular piece of information online (i.e., search for information), as opposed to just “looking around,” or, to use my terminology, COB.

COB may also have negative consequences: many companies seem to have realized that such “looking around” is often a consequence of unsuccessful information or product search, where consumers may be tired, disappointed, and otherwise unmotivated, and thus fail to make a purchase decision, much like in the case of choice overload (Scheibehenne, Greifeneder, & Todd, 2010). As such, these organizations have invested in facilitating and optimizing consumers’ online experience. Netflix, for instance, has released sequential updates to its search tool, aiming to help consumers choose what to watch, suggesting that reducing browsing activity will improve consumers’ experience. Similarly, Spotify has invested in artificial intelligence aiming to offer intelligent playlists for users, in an effort to minimize their browsing through catalogues of millions of available songs. Prior research has conceptualized browsing as offline behavior (Bloch, Ridgway, & Sherrell, 1989; Bloch & Richins, 1983), and browsing has been explored as part of search behavior in both consumer behavior (Dames, Hirschfeld, Sackmann, Thielsch, 2019; Moe, 2003b; Rowley, 2001) and information search (Moorthy, Ratchford, & Talukdar, 1997, 2016; Wilson, 2002) studies. However, although these

researchers have discussed COB and its consequences, the focus has been on analyzing clickstreams and paths consumers take online, and the impact of these on buying behavior. Therefore, COB has not been considered as a distinct behavior, and no research has clearly investigated the benefits, motivations, and threats of COB behavior to both marketers and consumers. This research aims to begin filling this gap. This paper contributes to literature in three distinct ways: first by theoretically proposing a conceptual definition for COB, second showcasing its uniqueness by comparing it with the concept of offline browsing, discussing which characteristics of COB are different than in offline browsing. And third by presenting possible positive and negative outcomes of COB, and how these outcomes are relevant to consumer behavior literature.

In the remainder of the article, I first review the literature and then discuss the main findings pertaining to COB and searching. Following this discussion, I propose a theoretical development towards a definition of COB. In the following sections, I describe the method and results of the two studies I conducted to empirically test the proposed definition of COB. I used a multi-method approach that allowed me to first scrutinize the differences between online and offline browsing via exploratory interviews with consumers about these two distinct behaviors. The information gathered was tested by conducting a survey of consumers to verify quantitatively whether the differences were statistically significant. This multi-method approach can be characterized as an exploratory sequential design (Meissner, Creswell, Klassen, Plano, & Smith, 2011). In the final section of this article I propose a nomological network for COB, and highlight this study's limitations, and future research directions.

2. Literature review

Browsing is a topic of interest in many areas of research. Browsing entails scanning through products or information in a leisure and casual way, at random.(Chang & Rice, 1993) As I will discuss later, the terms “casual,” “leisure,” and “random” are relevant parts of the definition of browsing when thinking about consumer behavior literature.

The multidisciplinary approach to browsing is one of the key aspects of this concept. Hjørland (2011) used browsing as a context to discuss the importance of assessing multiple theories of knowledge when discussing a concept. The author juxtaposed the dimensions and characteristics of browsing proposed in information science literature with the main findings in

other fields. In addition, Hjørland (2011) built on the conceptualization proposed by Bates (2007), which states that when individuals are browsing they (1) get a glimpse of what they are looking for, (2) often select or sample this object, (3) examine what they have found, and (4) conceptually acquire or abandon it. Browsing is a cognitive and behavioral expression of exploratory behavior, motivated by curiosity (Bates, 2007). However, the focus in this research was on the exploratory aspect of browsing; Hjørland (2011) criticized this as he stated that browsing may not be completely random but can also be used strategically. He argued that various theories can be used to navigate the concept, browsing can be used as an orientation strategy. He argued that “different people browse in different ways because they have different purposes and schemata or theories” (Hjørland, 2011, p. 600), and that individuals use their previous knowledge to navigate a series of possible paths when they are not sure which direction they should go. Thus, browsing can also be an orienting strategy that guides individuals in their search.

For marketing researchers, browsing has been discussed both as a distinctive concept, such as in the form of offline browsing (Bloch & Richins, 1983), and as dimension or part of related concepts, such as window shopping (Rowley, 2001), ongoing search (Bloch, Sherrell, & Ridgway, 1986), retail therapy (Atalay & Meloy, 2011; Sohn & Choi, 2014), couponing (Ieva, De Canio, & Ziliani, 2016), and thrift shopping (Bardhi & Arnould, 2005). In the online context, browsing has been researched as part of a search strategy that consumers engage in when they conduct an exploratory, nondirected search (Moe, 2003b; Ono, Nakamura, Okuno, & Sumikawa, 2012)

Thus far I have briefly described how browsing has been discussed as a multidimensional framework, with the aim of exploring and showcasing the main findings on browsing behavior in different areas of research. In the following sections, I explore the findings and discussions about browsing in consumer behavior literature. I then outline the relevance of discussing the characteristics of the online environment for consumer behavior, and argue that consumer online behavior should be discussed as a distinctive behavior, as it contains characteristics that differ from those conceptualized as part of offline browsing by Bloch and Richins (1983).

2.1. Browsing as a multidimensional framework

Browsing has been studied in various areas of research. This has been demonstrated by Chang and Rice (1993), who developed an extensive literature review on browsing as a broader category of behaviors and listed studies on browsing activities in different disciplines, such as library and information science (related to the search for information behavior), end-user information retrieval and system design (related to behavior when performing searches), mass media audience studies (related to search behavior pertaining to media or entertainment), organizational communication (related to social browsing, and browsing for information about companies or organizations), wayfinding and environmental design (related to discussions about cognitive, perceptual, social, and physical processes of search behavior), and consumer behavior. They proposed a general model to organize research on browsing, where browsing is influenced by consumers' behavior, motivation, cognition, and resources they have available to browse, which leads them to engage in browsing behavior that can result in positive (e.g. serendipity – that is related to unexpected, good things - and learning) or negative (e.g. disorientation, overload) consequences.

Thus, browsing is a human behavior that has been studied from various angles, and is an activity individuals engage in for a range of motivations or impulses, and for various reasons—rather than only when they need to search for information (Bates, 2007). Nevertheless, most research on browsing has been conducted within the information search field. According to this discussion, browsing is one stage of information search behavior, and is usually related to the early stage of search where the process of scanning information takes place (Wilson, 2017; Moorthy, Ratchford, & Talukdar, 2016; Savolainen, 1995). Ellis, Cox, and Hall (1993) suggested that browsing is part of a stage of undirected viewing during searching, where individuals scan previously selected information. This proposition is similar to that made by Wilson (2002), who suggested that browsing is a stage of information search during which individuals start to differentiate information they have found after scanning available information. According to Bates (2007), browsing is an iterative process of exploratory activities that may or may not lead to a desirable result, and usually follows four steps: glimpse a field of vision; select an object or information to further explore; examine that object or information; and finally keep it or discard it. Browsing then continues to other new glimpses, or ceases.

Browsing has also been extensively studied in the field of end-user information retrieval and system design, as this concept helps to explain how consumers navigate websites, and collect, exchanging, and offer information (Dames, Hirschfeld, Sackmann, Thielsch, 2019; Hider, 2006). In this area, researchers have mainly discussed the characteristics of websites that users consider when they browse. Recently, Dames et al. (2019) specifically discussed that users with directed goals (searching) versus nondirected goals (browsing) may perceive the aesthetics and content of websites differently. The many research fields agree that browsing incorporates scanning, accessing, or just looking through different types of information or products, without a defined or specific goal.

2.2. Browsing in the consumer behavior literature

In the consumer behavior literature, Bloch and Richins (1983) published a seminal article on browsing, which they refer to as “shopping without a purpose.” The authors defined browsing as an activity where consumers look for products without the intention to buy, for two main reasons: (1) to entertain themselves and (2) to collect information about a product in which they have special interest (with the intention to become an expert about that product). The authors then defined consumers as browsers (consumers willing to engage in browsing activities) or nonbrowsers, and noted that browsing is positively related to product interest, actively looking for information about a product, obtaining knowledge about the product, and engaging in word-of-mouth about the product. According to the discussion about prepurchase search by Bloch et al. (1986), the presence of a goal to fulfill a specific need drives consumers’ information-seeking and -processing activities, which aids their decision making during the buying process. The lack of purpose in browsing is what primarily differentiates it from the prepurchase search, where consumers have the objective of obtaining knowledge that will allow them to make better purchase decisions (Engel & Roger, 1978). Bloch et al. (1986) gave as an example of browsing consumers in a shopping mall, walking in and out of stores without looking at any specific products, looking through the options these stores have to offer. I refer to this activity as offline browsing, as it happens in a physical store.

In COB, some studies have considered the phenomenon mostly as part of the search behavior consumers engage in online, and classify the behavior as browsing when consumers do not have a specific goal, or are not intending to buy specific products. Moe (2003b) discussed

the three main behaviors consumers engage in in online stores as buying, searching, or browsing, and evaluated in-store navigational behavior in consumers to propose a typology of shopping patterns to better understand purchase behavior using clickstream information. Moe divided search behavior into direct and exploratory, counterpointed with what she called the immediate or future purchasing horizon.. Based thereon, she proposed four types of search behavior for consumers online: direct buying (DB), when consumers are goal-directed and looking for immediate purchase; search deliberation (SD), when consumers are goal-directed and looking for future purchases; hedonic browsing (HD), when consumers are searching in an exploratory manner for immediate purchase; and knowledge building (KB), when consumers are searching in an exploratory manner for future purchase. Rowley (2001) proposed that browsing is a relevant behavior to observe in consumers online, as it offers a possibility for firms to create product and relationship opportunities with existing and potential customers. However, later consumer behavior literature observed that browsing is part of search behavior, and that the discussions were centered mainly on the pathways and clickstreams consumers follow online, and how these clickstreams can be used in models to understand and predict consumer behavior online, where browsing is conceptualized as exploratory, nondirected navigation (Anderl, Schumann, & Kunz, 2016; P. Huang et al., 2009; Laing & Royle, 2013).

The concept of browsing has also evolved into various concepts within the consumer behavior literature. The entertainment dimension of shopping comprises two concepts that contain elements of browsing in their definitions: window shopping (Black, 2007), which is browsing to collect information about a product that the consumer is considering buying in the immediate or long-term future (Rowley, 2001); and retail therapy (Atalay & Meloy, 2011; Rick, Pereira, & Burson, 2014; Townsend & Sood, 2012), which is when consumers browse for products to buy to improve their mood. In both window shopping and retail therapy, consumers browse for things to buy in order to satisfy their need to shop. Window shopping is an offline concept, as it includes looking at the window in a physical store. Retail therapy does not have this limitation, as a shopping spree can happen either online or offline. What differentiates these concepts from browsing is the intensity of purchase intention. While in browsing the purchase intention may vary from low to high, in window shopping the purchase intention can only be high, and consumers are browsing what to buy. In retail therapy the purchase intention is even higher, because what it is the thrill of buying that drives purchasing behavior.

Consumer behavior literature has also discussed the thrill of getting a good deal (Bardhi & Arnould, 2005; H. Y. Kim & Kim, 2008; Schindler, 1989). This is also part of the browsing concept, as consumers browse opportunities to find good deals. Instead of searching for a product or a service out of curiosity, consumers that are looking for a good deal are seeking good sale opportunities. Concepts related to the thrill of getting bargains have been referred to in consumer behavior literature as thrift shopping (Bardhi & Arnould, 2005). As mentioned in above, the thrill of finding discounts has also been discussed as part of couponing (Bawa & Shoemaker, 1987) or e-couponing (Dickinger & Kleinjnen, 2008; Kang, Hahn, & Fortin, 2006), which is a form of compulsive behavior that comprises browsing for discount coupons either online or offline.

The informational dimension of browsing can also be transformed into a specific behavior: ongoing search. Bloch, Sherrell, and Ridgway (1986) proposed that ongoing search is motivated by consumers' interest in a specific product or service, for which these consumers are constantly looking for information.

Thus, the concept of browsing forms part of the definitions of several other concepts in the consumer behavior literature, where those listed above are the most relevant. Each has one or more characteristics of browsing: for example, in the ongoing search concept, product involvement is a key construct. With regard to thrift shopping—or even couponing—the excitement of finding good deals is also related to browsing, but the concept of thrift shopping is often discussed in a broader perspective, non-related to the browsing/search stage: finding good offers on products or services, or just relevant information about products or services. The excitement of retail therapy or window shopping is also part of browsing: even though purchase intention may vary from low to high, the thrill of possibly buying something may drive consumers' intention to browse. Table 4 summarizes these concepts, presenting their definitions and the key differences between each and browsing.

Table 4 Concepts related to browsing in consumer behavior literature

Concept	Definition	Key differences from browsing
Prepurchase search	“Information seeking and processing activities which one engages in to facilitate decision making regarding some goal object in the marketplace.” (Kelly, 1968, p. 273)	What drives the search is a specific product, where consumers browse to enable themselves to make a more informed purchase decision.
Ongoing search	“Search activities that are independent of specific purchase needs or decisions.” (Bloch et al., 1986, p. 120)	Involvement with a specific product is part of the definition of ongoing search, while browsing-related activities may or may not include specific product involvement.
Thrift shopping	“Thrift shopping is economic shopping in that it is an everyday activity conducted out of economic necessity. Thrift shopping is also hedonic shopping, where consumers thrift shop as a way of indulging their fantasies.” (Bardhi & Arnould, 2005, p. 225)	Consumer browsing is driven by the economic possibility of finding deals, while in browsing looking for deals may or may not be part of the motivation.
Couponing	Coupon-prone consumers purchase with coupons “above average (in comparison with other households) across many product classes.” (Bawa & Shoemaker, 1987, p. 100) In this category, “price savings have been identified as the main driver for coupon use.” (Ieva et al., 2016, p. 300)	Coupons play a central role in this browsing behavior, but consumers browse for coupons themselves, rather than products or services.
Window shopping	“A process that allows shoppers to collect information about products that they might be considering buying in either the immediate or the longer-term future.” (Rowley, 2001, p. 369)	While window shopping is focused on offline context, as offline browsing, the purchase intention is higher than browsing, as consumers seeks for products to buy in immediate or long-term.
Retail therapy	“Cheer oneself up through the purchase of self-treats.” (Atalay & Meloy, 2011, p. 638)	The purchase intention in retail therapy is higher than in browsing, and this purchase intention drives the browsing behavior.

In the following sections, I will discuss with more detail three main dimensions of browsing behavior: entertainment, information, and exploration.

2.3. The entertainment aspect of browsing

As Bloch and Richins (1983) noted, one of the reasons for browsing is to have fun; this can be divided into two categories: the fun of getting a bargain, or a good deal; and the fun of shopping itself. The former addresses the drive to find a smart buy (Schindler, 1989), and obtain value for money; the latter addresses the need to shop (Holbrook & Hirschman, 1982). For each of these, related concepts have been discussed in the consumer behavior literature. For example,

the search for good deals entails the concept of arousal from getting a bargain (Schindler, 1989), couponing (Bawa & Shoemaker, 1987), or electronic couponing (Dickinger & Kleinjnen, 2008), where consumers engage in searching for discounts—shopping conditions that lead them to find good deals in their shopping routine. These concepts incorporate browsing as a stage in the process of scanning for deals. What differentiates couponing from browsing is the key role that coupons play in the browsing (offline or online) behavior. In couponing, consumers browse coupons to find deals, and not the products available *per se*. A related concept discussed in the literature is thrift shopping (Bardhi & Arnould, 2005; Schindler, 1989), which pertains to the thrill consumers experience when they feel they have made a good purchase decision, or a smart buy. Here, consumers browse for opportunities to buy things that are on sale. This concept is similar to couponing, with the difference that in thrift shopping consumers look for bargains in a more specific manner, focused on products of interest, and engaging more actively in browsing via stores, malls, or websites for the best options available at that time (Guiot & Roux, 2010; Schindler, 1989), independent of whether they have coupons. In couponing, the search is more focused on the availability of promotional coupons (Bawa & Shoemaker, 1987; Ieva, De Canio, & Ziliani, 2016). Thrift shopping can happen either online or offline, and differs from browsing (either online or offline) because what drives the browsing behavior is the possibility of finding good deals. In the offline context, instead of browsing an entire store, a thrift shopper will go straight to the sales rack. In the online context they will do the same—that is, they will click to find sales, and focus their browsing on that part of the online store.

The hedonic aspect of COB with respect to consumers' perceptions of products and services is more prominent in products with which consumers are involved, where they are seeking an experience from online shopping, rather than engaging in goal-directed online buying behavior (Wolfenbarger & Gilly, 2001). The classification of hedonic and utilitarian shopping has often been used in literature about browsing: a browsing experience is utilitarian when it is related to buying products where the search goal is directed (E. J. Park, Kim, Funches, & Foxx, 2012), mission oriented (Kesari & Atulkar, 2016), or focused on the search for specific information (P. Huang et al., 2009); it is classified as hedonic when the focus of the browsing is on products with which consumers are involved (Kesari & Atulkar, 2016), where information provided by experienced users is also relevant for browsing (P. Huang et al., 2009).

Mathwick and Rigdon (2004) proposed that online information search about a product can be transformed into a positive experience, bringing joy to consumers. This transformation

is moderated by product involvement, and is also related to the skill consumers have to browse information. If their skill to collect and process information is sufficient and product involvement is present, they get a positive feeling from browsing; however, if skills are insufficient, it could lead to a negative perception of the browsing experience, creating feelings of anxiety.

2.4. The informational aspect of browsing

One of the key aspects of browsing is product involvement, which has been defined as “an ongoing commitment on the part of the consumer with regard to thoughts, feelings, and behavioral response to a product category” (Quester & Lin Lim, 2003, p. 24). As identified by Bloch and Richins (1983), consumers may browse in order to become better informed about products or topics, so information seeking is one of the motivators of browsing. Some years later, Bloch et al. (1986) proposed the concept of ongoing search; this is related to browsing and entails gathering more information about specific products, and was defined by Bloch et al. as “search activities that are independent of specific needs or decisions” (p. 120). Specifically, the concept refers to consumers’ ongoing interest in searching for information about a product with which they are involved. For such products, consumers engage in a type of ongoing browsing, frequently looking for information about new releases, and discussions about the product with specialists, in magazines, or at tradeshow. The search is constant, unrelated to the need to buy, but pertains to a need of know more about the product. Bloch et al. (1986) acknowledged that the line that separates ongoing search and prepurchase search is blurred, as the decision to buy may arise during the ongoing search, but that the motives for the search differ. Rather than making a decision to buy, consumers that engage in ongoing search do so for hedonic reasons, since, because of their involvement with the product, they experience fun and pleasure from acquiring more information about the product, and retain information for future use. What makes ongoing search a distinct behavior from offline browsing is that the former is conceptualized as a browsing activity where product involvement “is enduring in character” (Bloch et al., 1986, p. 120), which is not part of the concept of offline browsing.

Consumers may also browse for information when they are uncertain about specific brand or product characteristics, so that their goal is to mitigate their uncertainty. Moorthy et al. (2016) argued that consumer browsing depends on whether there is relative brand

uncertainty. The informational aspect of browsing may also relate to minimizing risks in utilitarian, goal-directed browsing (Ozkara, Ozmen, & Kim, 2016).

2.5. The exploratory aspect of browsing

One characteristic that is central in browsing is its exploratory nature. Even in the definition of browsing in other disciplines, the exploratory nature of browsing is a key aspect, as consumers engage in it to understand what is being offered in a more experiential manner (Pace, 2004). Scanning is part of the exploratory behavior in browsing, where consumers peruse the available options to drive their navigation (Moorthy et al., 2016; Sismeiro & Bucklin, 2004). Bates (2007) considered browsing as the cognitive and behavioral expression of an individual's exploratory behavior.

Browsing is an exploratory way of looking for something. It includes scanning behavior, and mixing it with previous knowledge about a topic, the presence of a purpose or objective, and search criteria (Chang & Rice, 1993). COB is exploratory for both experiential and goal-directed consumers (Zheng, Men, Yang, & Gong, 2019). For the former, the experience of visiting a website and exploring products is part of the browsing experience, while for the latter exploratory behavior focuses on finding ways to optimize the browsing experience.

2.6. Characteristics of online context

In line with the literature, an individual continues to browse in a nongoal-directed manner (i.e., without intention to purchase) to the extent that the available resources (e.g., time) allow, and the costs of this activity outweigh the benefits one may perceive (Brown, Pope, & Voges, 2003; Savolainen, 1995; Wilson, 2002). When the browsing concept was first discussed in the literature, relevant barriers were considered in the offline context, such as the need to physically go to a store, resulting in financial cost (e.g. transportation costs, entrance fees), and allocate time to commute to the stores, peruse stores, and return. In the online context most of these barriers disappear, as there is no physical displacement, no fee to access websites, and rarely do consumers pay to access specialized information online, as most websites are free. I propose that these characteristics make COB a distinct behavior; however, to my knowledge, few studies have addressed COB as a specific behavior (Brown et al., 2003; Rowley, 2001), and most research in the online context has focused on online buying behavior (Canniford,

2011; Ganesh, Reynolds, Lockett, & Pomirleanu, 2010), or on analyzing clickstreams to optimize website results (Cheung, Zhu, Kwong, Chan, & Limayem, 2003; Hauser et al., 2009; Moe, 2003b).

The online environment has completely changed the business landscape and marketplace characteristics (Kannan & Li, 2017). Companies such as Facebook, Google, Uber, and AirBnB are amongst the biggest companies in the world, with exclusive operations online (Kannan & Li, 2017). Forrester Research (2017) stated that digital marketing accounted for 62% of advertisement budget in the US in 2017—a market that is expected to surpass US\$ 130 billion of investment in the US alone in 2021. Search ads are expected to be responsible for US\$ 52 billion of that budget. In addition, changes have occurred in the marketplace due to online businesses, with ongoing advancement in digital technologies and devices such as smartphones and other smart products. Artificial intelligence, and the Internet of Things, promise to radically change the marketplace in the coming years (Kannan & Li, 2017).

There are several characteristics of the Web environment that make COB a more appealing experience for consumers. Sismeiro and Bucklin (2004) highlighted the fact that the online environment offers no impediments to browsing, as consumers face very few restrictions to browse websites. Anderl et al. (2016) discussed the multiple touch points consumers have to access companies and brands via digital media. Depending on the goal a consumer has for connecting with a brand or firm via their digital channels, they may perform one of two types of browsing: informational, when they want learn something; or navigational, when they want to access specific content. Anderl et al. (2016) allocated the informational search to three online marketing channels: direct type-in (when consumers type in exactly what they want to search), branded search (when consumers use keywords related to a brand's name), and generic search (when consumers type in generic terms).

The anonymity that online behavior offers has also been discussed in regard to consumer behavior as a positive aspect. Researchers have considered the characteristics of anonymity in online shopping and the buying behavior regarding products connected with embarrassment (e.g., adult diapers, condoms [Dahl, Argo, & Morales, 2012]). From a broader perspective, studies have discussed the anonymity of the online consumer experience (focused more on shopping behavior [e.g., Rose, Clark, Samouel, & Hair, 2012]), and the relevance of social presence in the retail environment (e.g., Argo, Dahl, and Manchanda, 2005), where the focus

has been on the impact of the presence of other people in retail environments, which includes offline browsing and has been reported by interviewees (Gilly & Wolfinger, 2011) as a restriction in their browsing activities.

In consumer behavior literature, the concept of flow has been highlighted as connected to the online environment. Hoffman and Novak (1996) adapted the concept of flow for the computer-mediated environment (in which COB is inserted) as a mode of navigation with four characteristics: (1) seamless sequences of responses, (2) generating intrinsic enjoyment, (3) accompanied with a loss of self-consciousness, and (4) self-reinforcing. Flow entails full immersive attention, defined as “the holistic sensation that people feel when they act with total involvement” (Csikszentmihalyi, 2000, p. 36), and Novak, Hoffman, and Yung (2000) suggested that consumers may achieve flow during online navigation, such that thoughts and perceptions not related to the online navigation activity are screened out. Sanchez-Franco and Roldan (2012) proposed that flow is a positive state of mind that happens when consumers have an adequate set of skills to perform a task online that they enjoy. Ozkara et al. (2016) suggested that flow is an experience where consumers relinquish their control over time and concentrate on the activity they are performing. They control every part of their interaction with the computer, enjoy the experience, and are curious about the activity. The authors indicated that flow is an appropriate theoretical framework for online environments.

Novak, Huffman, and Duhachek (2003) classified consumers’ online behavior into two different types: goal-directed and experiential. The former relates to prepurchase search, as it is extrinsically motivated, situational, utilitarian, directed, a goal-directed choice, and cognitive. The latter is related to browsing, as it is exploratory, intrinsically motivated, enduringly involved, hedonic, nondirected/exploratory, and affective.

Mahnke, Benlian, and Hess (2015) studied the presence of goals and their relationship with the concept of flow in online shopping. The authors suggested that consumers that shop online with a broad goal often do not recognize the subgoals their broad goal entails during their COB (they do not recall the goals of their exploratory behavior online) because of the flow experience, as these consumers enter into what the authors called deep absorption in the activity. Another aspect related to flow in the online environment is the relevant part of curiosity and interest in the activity. Pace (2004) advocated that curiosity and interest in the activity are key elements for consumers to experience flow in online environments, and this is independent

of broader or specific goals. Pace (2004) also advised that flow in browsing activity may lead to full attention during the browsing navigation, leaving no room for other thoughts during the experience.

2.7. Use of online browsing information

As mentioned above, a relevant part of the consumer behavior literature about browsing has analyzed clickstreams in order to identify ways to use COB information. Moe (2003b) used such information to propose a typology of different types of browsing; however, there are also practical examples of marketplace implications of understanding browsing behavior. For example, Montgomery, Li, Srinivasan, and Liechty (2004) studied clickstreams of consumers and found that the goal consumers have when visiting a website are essential to predict how the page visit this consumer will have at a website. The authors proposed a mathematical model using data from purchasing and browsing behavior, which they affirmed can predict purchase with more than 40% accuracy. Bucklin and Sismeiro (2003) proposed a model to predict the path consumers take on websites, based on patterns of past visit and browsing behavior. Another area that has used clickstream information from browsing navigation is website morphing (Hauser et al., 2009), which uses artificial intelligence tools to offer consumers a website design that fits the purpose of their navigation.

3. Theoretical development of the concept for consumer online browsing

The definition I propose for COB *is a dynamic and iterative online act of looking around on commercial website(s), with a purpose of simply exploring products and services for fun, to distract or entertain oneself, whereby purchase intention is low.* The elements of this definition are explained in the following paragraphs.

The classic definition of a purchase funnel—where consumers first discover or become aware of a need, then start looking for options to fulfill that need until they are able to define some options, compare them, and choose one to purchase the product (Jansen & Schuster, 2011)—has long been used in consumer behavior literature. Some years ago, the concept of the consumer journey, which refers to the paths consumers take when consuming and using a product, also gained attention in the literature, as it addresses the multiple touch points consumers have with a brand or a product. Even in this new concept of the consumer journey,

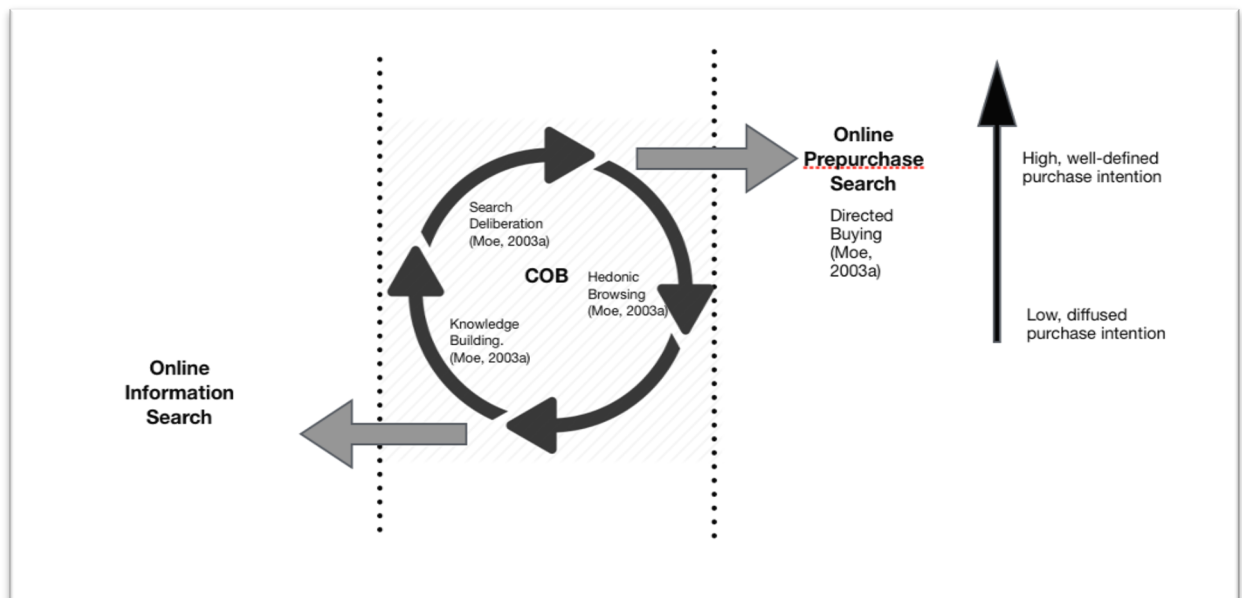
the stage before actual purchase has been little explored, as seen in Chapter 2 of this dissertation. This area, where a need is discovered by a consumer or fostered by brands, is indeed complex because it includes multifaceted concepts such as formation of desire, needs, and affect, which interplay with advertisement and communication, amongst several others, to get to the need that drives consumers. One good example of how complex this part of the buying process is can be seen in a publication by Kozinets, Patterson, and Ashman (2017) that discusses theories of formation of desire counterpointed with the impact of social networks on consumers' minds.

Two additional concepts are related to COB behavior—information seeking and prepurchase behavior—and I think it is important to clearly distinguish the boundaries between them. When consumers seek information, they are not interested in consumption-related aspects, so they are able to get the information via news websites, blogs, and so on. However, if there is purchase intention, even if very small, they will prefer to visit websites where they can find information related to purchase. Thus, I propose that the difference between information seeking and browsing lies the statement “a website where purchasing is a possibility.” This excludes browsing in information-only websites. The second concept, prepurchase behavior, entails consumers going online to gather specific information about a defined product, with the aim of making more informed purchase decisions. This behavior is goal-directed, as mentioned in the literature review, and the product is clearly defined.

As stated by Moe (2003b), such browsing behavior is called DB. Thus, the second area that delineates the concept of COB is when there is a directed, well-defined product search with a high purchase intention. Moe's (2003b) study is interesting in the context of the definition proposed for COB above, as she suggested four different types of browsing behavior: DB, SD, HB, and KB. The definition I propose for COB includes three of these types of search behavior, excluding DB (when consumers visit a webpage with a goal-directed and immediate purchase intention). The other three types of behavior are represented in the circle of Figure 3, where definition of the product and the purchase intention vary from low to high. In DB, consumers exhibit highly focused search patterns, visiting pages within a limited number of products and categories. Moe (2003b) analyzed 7,143 visit sessions and used cluster analysis to define the typology. DB searchers visit a few products and categories, but intensively visit specific product pages, which is actually inconsistent with what I refer to as browsing. Likewise, KB does not entail visiting a variety of product or category pages; however, from the definition it is possible to assume that in order to acquire knowledge, KB searchers must visit different websites.

The other concept that is close to COB is prepurchase behavior. When a consumer engages in prepurchase behavior, they have already decided to buy the product and are simply choosing amongst the available options. The boundary I propose in this case is the product definition; that is, if a consumer has not yet defined the specific type of product they will buy, they are still browsing, and even if their mindset is focused in exploring few products, it is still browsing. When the product is clearly defined, this relates to prepurchase. Thus, in COB the intention to purchase may be high or low, and the product definition may be very diffused or well-defined.

Figure 2 Representation of proposed definition of COB



In Figure 2, a circle is used to represent COB because the browsing activity is dynamic, iterative, and has several directions; thus, the circle represents the diversity of the interplay between purchase intention and product definition consumers face when they browse. A consumer may start browsing a website with very low purchase intention and diffused product definition. During COB, their purchase intention and product definition may both vary from low to high. If they achieve high purchase intention and product definition, they will enter the prepurchase search, and their browsing behavior becomes what Moe (2003b) defined as DB, which is limited to defined products, with the aim of collecting specific, directed information. At this point, the activity is no longer browsing. Purchase intention may also reduce to a point

at which consumers exit the website and focus on other types of navigation, such as information search. In addition, during online browsing, consumers may find information that they engage in, acquiring knowledge about a specific product, or browsing through different types of products to find the one they actually want.

To demonstrate that COB is a distinct behavior, I compare my proposed definition with offline browsing; this can be considered the closest related concept as it includes the entertainment, exploratory, and informational aspects of browsing. When Bloch and Richins (1983) proposed the concept of browsing in the consumer behavior literature, they were discussing the specific behavior of going to a store without the intention to shop, but rather to look around for fun, or to get information. They were considering the offline context where consumers actually need to go to physical stores in order to browse, which demands time, money, and most often previous planning. Above, I presented characteristics of the online context that make COB behavior a unique concept compared to browsing in the offline environment. In the online context, it is not necessary to previously plan to browse; users can simply click and start browsing. In addition, there is no physical displacement or need to spend money. The products, brands, and services offered in the online context seem infinite, and these characteristics have different impacts on the three main drives of browsing: entertainment, exploration, and information. A consumer may be curious about a product and visit a website that sells the product in order to better understand it. Or they may find it amusing to browse specific products of interest, to ease their mind, relax, or search for inspiration. This COB can be either intentional, when the consumer decides to go on the Internet and browse; or unintentional, when an ad or link stimulates them to start online browsing. Unlike the offline concept, online browsing does not need planning, and consumers can engage in it multiple times. In addition, unlike offline browsing there is an intention to purchase that drives the online browsing activity. This intention may change during online browsing; it can increase, decrease, evolve into a buying process, or remain in the informational aspect of online browsing.

The amount of browsing a consumer engages in depends on the availability of information and the cost to acquire this information (Punj & Staelin, 1983; Shim, Eastlick, Lotz, & Warrington, 2001). In the offline context this could be a restriction, but if we consider “the quantity and quality of individually customized information that the Internet can provide with minimal effort and cost” (Peterson & Merino, 2003, p. 99), it is expected that COB behavior occurs in a more intense, continuous, and complex manner compared to in the offline context.

Several other characteristics of offline browsing also limit browsing behavior; for example, stores and products consumers browse are limited to the immediate surroundings. This limitation does not occur online. In addition, consumers tend to go to the same stores when they browse offline, and this also limits what they encounter. This restriction does not apply online, and with the constant increase in investments in digital media it is likely that consumers are impacted with a growing number of websites that they have never visited before. The fact that online consumers tend to visit unknown websites makes them more likely to encounter serendipitous findings. Serendipitous findings are related to unpredicted findings, something consumers stumble upon when browsing, caused by “the very act of browsing [which] allows a user to recognize information of value in other contexts than that in mind when the search was started” (Case, 2007, p. 90). The presence of salespeople in offline contexts is also a difference between offline and online browsing. Due to the present of salespeople in stores, consumers may feel embarrassed about looking for something specific, or pressured to buy (which is an incentive to engage in unplanned and/or impulsive buying), and may alter their browsing experience (in comparison to how they would behave if they were online). Table 5 lists the differences between COB and offline browsing behavior.

Table 5 Differences between offline browsing and COB

Offline browsing	COB
Limited variety of brands and stores	Unlimited variety of brands and stores
Needs previous planning	Does not need planning
Consumers have less control	Consumers have more control
Impulsive buying	No impulsive buying
Unplanned buying	Planned buying
Requires free time (physical displacement)	Can be done in between tasks (no physical displacement)
Presence of salespeople	No presence of salespeople
Unlikely to lose track of time	Likely to lose track of time
Unlikely to encounter serendipitous findings	Likely to encounter serendipitous findings

4. Methodology

To conceptually develop and further investigate motivations behind, and outcomes of, COB, it is important to highlight that COB is indeed a unique concept in the consumer behavior literature. This research seeks to better understand how COB differs from previously conceptualized offline browsing behavior (Bloch & Richins, 1983; Bloch, Sherrell, & Ridgway, 1986), and to develop testable propositions related to the unique antecedents and consequences of COB to be tested in subsequent empirical studies.

To this end, I compared COB with offline browsing and explore the differences between these two concepts. I applied a multi-method approach as it allows me to first scrutinize the differences between online and offline browsing via exploratory interviews with consumers about these two distinct behaviors. The information gathered in these interviews acted as preparation for a survey in which I tested quantitatively whether the aspects that appeared to differ across these concepts were in fact significant. This multi-method approach can be characterized as an exploratory sequential design (Meissner et al., 2011), as it starts with a qualitative study to gather information that acts as preparation for a quantitative study that leads to findings related to the research question.

Both qualitative and quantitative studies were executed in two different countries, Brazil and the USA, with the aim of amplifying the generalizability of the findings, and also as a way to make sure that local restrictions in online behavior (such as logistics) does not interfere in the discussion in this study. A total of 19 consumers were interviewed: 13 Brazilians, four Americans, and two Europeans. Subsequently, 517 consumers participated in the survey: 214 in the US, and 303 in Brazil. Details of these studies are presented next.

5. Study 1: Exploratory interviews

The interviews followed the iterative process suggested by Arsel (2017), where protocol was constantly reviewed and adapted for each interviewee, as well as including or excluding topics as I progressed from one interview to another. I adopted a phenomenological approach (Thompson, 1997) to analyze the data, and summarized it according to themes. Interviewees

were selected using social media channels, where I asked individuals that see themselves as online browsers, or consumers that spend a considerable amount of time online, to participate.

I first conducted three exploratory interviews with participants that classify themselves as online browsers (i.e., who define themselves as enjoying spending time on websites just looking around, without any specific desire to buy) without designing a specific interview protocol; later, I conducted 16 interviews with online browsers and constant online searchers with an interview protocol designed with relevant topics found in the first three exploratory interviews, and related to information from the consumer behavior literature. Table 6 presents the interviewees' demographic information.

All names are fictional to ensure respondents' privacy. The names were generated from the cast of the movie *We Need to Talk About Kevin*, which inspired the title of this article, and were randomly assigned. All interviews were recorded and are available for future verification. Almost 1,000 minutes of recorded material was transcribed into 340 pages of text to be analyzed and coded. The interviewees were fairly balanced in terms of gender, with 12 women and 7 men, with ages ranging from 21 to 51, and an average of 38. More than half of the interviewees were married, and most did not have children. Thirteen of interviewees lived in Brazil, mostly in São Paulo; four lived in the US; and two in Europe. The decision to include interviewees from diverse countries was made to capture a global perspective of the phenomenon of COB, mitigating possible context-based bias related to online behavior.

Table 6 Demographic information about interviewees.

Interviewee	Gender	Age	Profession	Civil status	Country	City
Tilda	Female	45	Architect	Married, with children	Brazil	Ribeirão Preto
Ashley	Female	46	Public relations	Married, without children	Brazil	São Paulo
Leslie	Female	51	Journalist	Married, without children	Brazil	São Paulo
Ursula	Female	40	Business owner	Married, with children	Brazil	São Paulo
Lauren	Female	47	Architect	Married, with children	Brazil	São Paulo
Ezra	Male	41	Life coach	Married, without children	Brazil	São Paulo
Sioban	Female	40	Sales	Married, without children	Brazil	São Paulo
Kelly	Female	30	Marketing manager	In a relationship, without children	Brazil	São Paulo
John	Male	26	Undergrad student	In a relationship, without children	Brazil	Serra Gaúcha
Alex	Male	21	Undergrad student	In a relationship, without children	Brazil	Serra Gaúcha

Georgia	Female	24	Undergrad student	In a relationship, without children	Brazil	Serra Gaúcha
Polly	Female	22	Undergrad student	Single, without children	Brazil	Serra Gaúcha
Suzette	Female	41	Sales	Married, without children	Brazil	São Paulo
Jasper	Male	51	Nurse	Single, without children	US	New York
Erin	Female	40	Professor	Married, with children	US	New York
Rock	Male	40	Professor	Married, without children	US	New York
Alex	Male	45	Sales	Single, without children	US	San Diego
Kenneth	Male	35	Professor	Single, without children	Hungary	Budapest
Paul	Male	38	Consultant	Single, without children	Germany	Berlin

5.1. Content analysis

One important thing I noticed during the interviews is that, indeed, the lines that separate general online searches (e.g., reading the news, looking for information), COB, and online prepurchase searches (e.g., comparing different products for a specific purchase) are blurred, and *the process of going from one type of search behavior to the other is dynamic*. This is consistent with the literature, that states that it is difficult to separate when one type of search becomes another (Bloch et al., 1986). The behavior is also more complex and dynamic compared to the linear models proposed in search literature (Wilson, 2002).

To analyze and codify the data I used conventional content analysis, as it is considered useful in cases where the aim is to describe a phenomenon (Hsieh & Shannon, 2005). In this approach, data is categorized during the analysis of interviews. I also adopted a phenomenological approach (Thompson, Locander, & Pollio, 1989), where the analysis is focused on the interviewees' perceptions and lived experiences; this is similar to the approach used by O'Guinn and Faber, (1989) to discuss compulsive buying—the main topic of the previous chapter.

During the codification stage, I found 111 different codes. These were grouped into 49 themes, which were then grouped into 12 different topics to be explored in detail to drive the discussion of the findings of this exploratory study. This approach was inspired by framework analysis (Ritchie & Spencer, 2002), where familiarization with a theme is related to the coding stage, the first stage of analysis of the interview data. The subsequent stages (identifying a thematic framework and indexing) are related to the stage where I grouped the 111 codes into 49 themes. As the objective of this study is to offer insights and directions, acting as preparation

for a quantitative study, I did not conduct detailed analysis into frameworks that would connect the 49 themes found in the interviews, which would be close to the charting stage in the framework analysis. However, I did group the 49 themes into 12 different topics. This grouping was necessary to help map and interpret the findings and present concepts that would guide the quantitative work.

As transparency in the methodology is a highly pertinent aspect of qualitative studies (Creswell, 2007; Hsu et al., 2006), for each of the 12 topics derived from the exploratory interviews I list the themes that were grouped into each topic. I briefly explain the meaning of each theme, and for each I include one quote that was categorized into the theme, so that the process of coding is clear. Table 7 presents the main themes discussed in each of the 19 exploratory interviews, in order to elucidate how the emergent themes were discussed in each interview. From the table it is also possible to understand the relevance of the themes and topics. In an effort to make my methodology as transparent as possible, Appendix 1 includes the interview protocol that served as a guide during the interviews, and a transcription of two full interviews, one with a Brazilian, and one with an American, so that readers can access part of the raw data and verify how it was codified into themes and topics presented as a result of the analysis of these exploratory interviews.

Below, I briefly discuss each topic, with the main information collected from the interviewees' perspectives. The themes of each topic and illustrative quotes can be found in Table 7.

Table 7 Topics and themes from the exploratory interviews

Topic	#	Theme	Illustrative quote
Browsing negative outcomes	1	Sometimes s/he loses track of time in online browsing.	"I think that online is much easier (than offline). But it is also easy to lose the thread. and it always takes longer time, I mean, when I search for something online it always takes longer because you get lost during the search." – Ashley
	2	There is a perception of frustration due to the (unplanned) time spent browsing online.	"I'm going to do it for 5 minutes and then I tend to maybe spend more time doing it or not so, then I still feel frustrated right at the end." - Erin
	3	Anxiety of losing opportunities as a negative outcome	"I could not browse this morning, and I am feeling, I don't know, a negative feeling, like anxious, because I don't know what I missed." - Sioban

Topic	#	Theme	Illustrative quote
	4	Browsing (online or offline) for high value products elevate the feeling of anxiety of investing money in these purchases.	"It makes me anxious, specially when it is a high value product, like a sofa. I buy, and I keep thinking if I should have bought it, and why. I have this kind of anxiety with all products that are more expensive." – Tilda
	5	Negative perception of being spied after browsing - ads related to products start to follow. Strong negative perception.	"It just let me know that somebody is watching what you're browsing. So I don't really like that but I like using Google chrome but I don't particularly like that they do that." – Kevin
Browsing positive outcomes	6	Inspiration to work routine also is mentioned as a valuable positive outcome from online browsing.	"I'll see an ad for something that's completely unattainable but it's kind of looks pretty like paintings at Christy's and that looks like something that seems interesting and cool. I'll go there and not thinking about buying anything for sure." - Rock
	7	Reports serendipity findings in online browsing, incorporating new brands and products into the buying routine	"I think something like "Hum I don't know, let's see if this print is really good". And I start to search about what people say about it. And then someone says: "this printer is really good with Paper X", and I go like "What? I've never heard of this paper", so I start to look for this paper." - Ashley
	8	Feels relaxed after browsing.	"When I need to relax my mind I like to go online and browse for clothes." - Polly
	9	Inspiration to hobbies and freetime is reported as positive outcome	"When I go there, I wonder about what I can do. I love cooking, so it is a time when I am thinking about what I am going to prepare." - Tilda
	10	Online browsing motivates to pursue a better life. Intentionally browse for products s/he aspire as future goals	"I pick one house, and I spend weeks looking at it, imagining all the things I could do there." - Ezra
	11	The amount of information online empower consumers to buy better either online or offline	"I know lots of technical details, like, I know now that we cannot buy a cell phone with less than 8GB of memory, only the system would use half of that, so I learned that through searching." - Tilda
Compulsive behavior in browsing	12	Reports compulsive behavior (e.g. online browsing everyday, feeling anxiety when do not browse, .binge watching, gaming)	"So he (husband) knows there is an app I browse everyday (Westwing). Even on weekends, he is always saying "oh you are in that app again". - Sioban
Conscious consumption	13	s/he is aware about conscious consumption. s/he acknowledges her tendency to buy much more than she needs to, but s/he reports conflicts and difficulties in controlling her impulses to buy.	"Now I think that I have to buy less things, but with good quality, but if I don't pay attention to my behavior, I end up buying the same amount of things, but more expensive things" - Kelly
	14	S/he defines her/himself as a conscious shopper, the browsing is much more related to acquire information.	"But I browse more to get information, I never buy anything, I only buy things when things need to be thrown away." – Jasper

Topic	#	Theme	Illustrative quote
	15	S/he thinks money should be spent on experiences and not on products	"I don't consume things. I don't buy things. I don't like having lots of things. But I like experiences. So my main interaction with browsing experience is over podcasts. So I listened to a ton of podcasts." - Paul
	16	Develops strategies to use and buy only products s/he needs	"I have my closet set up is I have everything. I make sure I go right to left and I'll wear every shirt. From right to left on hang on the clothes on another closet really. Yes if I pass a shirt up twice. I'll get rid of it." – Jasper
Entertainment aspects of browsing	17	Sees browsing as a recreational activity and tend to do it whenever there is free time. Online, s/he does it in between tasks, in leisure breaks during the days. Offline, goes to the mall and intentionally spend hours there.	"I really enjoy going to the mall, you know, here in Brazil malls are more than just shopping, they have this concept of leisure with food, movies, so I can spend hours there, just walking, and loving it." - Kelly
	18	S/he likes thrift shopping, so browsing for discounts (either online or offline) is fun	"So Privalia is an app with only discounts, so I love it, I always browse there, I don't know, it feels good, I don't buy, it feels like just by looking at the sales satisfies me." – Alex
	19	S/her hates shopping and related activities. Offline browsing is not fun at all.	"I do not enjoy like say going to a mall to just window watching. I might go to a shopping mall but it's with a very clear orientation to basically do as much shopping as I can so I don't have to do it again." - Rock
	20	Hires professionals to shop for them.	"I have a man who can buy it for me because I hate going to shopping malls, et cetera. He's the one who can arrange it for me." - Kenneth
	22	S/he usually do all the prepurchase search online and buy offline	"I usually like to browse for products, take a look at them, see how much they cost, different types, and then if I really want to buy, I go look for it in a store." – Polly
	47	Passionate about shopping - positive perception of time spent browsing either online or offline	"It is funny. I realized that I browse in Privalia almost everyday for the last 2 years,, and I never bought anything there. I just think it is fun to browse there." – Alex
Impulsive buying and browsing	23	s/he is an impulsive buyer offline but not online.	"Yesterday, I removed three items from the shopping cart that I put there in an impulsive, but I waited for two, three days, and decided to remove them from the cart." - Lauren
	24	Reports regrets due to impulsive buying after offline browsing	"Actually, the last thing I bought (offline) was impulsively, and I regret it, I just bought because it was too cheap, but in the end, I didn't like the tshirts I bought." – Alex
Motivation for browsing	25	Intentionally dedicate time to online browsing. Views as recreational activity and feels relaxed	"I like to go browsing for clothes, you know, just take a look at things. Just by looking at them sustains me (it is enough)." – Kelly
	26	High involvement with product leads to positive perception of browsing	"I always buy shoes online, it is something I like, I mean, I go browsing for shoes everyday, almost everyday."- Alex

Topic	#	Theme	Illustrative quote
	27	Social media leads to unintentional online browsing - as s/he has a high product involvement, ads in social media tend to lead to online browsing	"I consume lots of information about a product I like on Instagram, like a skirt I am interesting in, for example, I go to Instagram and see lots of models that I like." – Suzette
	28	Online browsing is a scapism tool to avoid unwanted tasks (intentionally begin to online browse as a way to avoid the task).	"you know that time, when you return from lunch, that you have some minutes like that, that you just ate and you have a sort of laziness, before returning to work again, I like to start browsing, just before for a while." – Kelly
Offline browsing characteristics	29	The presence of salespeople negatively influences browsing or buying behavior, possibly leading to impulsive buying.	"I want them (salespeople) to stay the fuck away from me and not talk to me please." - Rock
	30	Likes to offline browse when travelling. It is a way to know more about the places s/he visits.	"The only thing I like actually (browsing) is when I'm on vacation, if I'm on vacation and my mindset is I don't have to get work done, then I enjoy it." - Erin
	31	Feels the need to try on clothes, which is an impediment to buy clothes on line.	"I try clothes I have a size which is a bit over the casual size and I cannot get the clothes I want to have." – Kenneth
	32	Offline browsing demands time that s/he can not spare	"If I have time, I go, like it is Sunday, then I have some free time, then I go the mall and spend, I don't know, about 40 minutes, one hour in a store." - Georgia
	33	Likes to go browse offline and usually goes to the same stores	"I am used to always go to the same stores, then I went to see new products in the stores I like " - Tilda
	34	The availability of stores in the city limit the offline browsing experience	"I live in a very small town, so there are only a few stores to go to, so I never browse there, only when I go to Caxias (other city) that I can go to the mall."- John
	35	Treats offline browsing for products with high involvement as a special occasion	"I certainly also used to have positive feelings and feel relaxed when I go to cooking shopping stores." - Rock
	36	Feels uncomfortable in offline browsing.	"I don't like to sweat in these shops and I feel uncomfortable inside the shops and usually I don't like being there." - Kenneth
Online browsing characteristics	37	The control in the online browsing is much appreciated, as s/he can spend as much time and look for information the way s/he wants to. Offline this is not possible because of the presence of salespeople.	"you have this good thing that you can look at things for the time you want, you can be there looking for hours, I love that." - Ashley
	21	Needs to buy things for family and online shopping is a necessity.	"I have to wear multiple hats at the same time, I tend to oftentimes kind of wear several of the same time and so having access to online pretty much at all times, it's very important to me" - Erin

Topic	#	Theme	Illustrative quote
	38	S/he thinks online browsing and buying is much more complex because there are several options to choose from	"Online is much easier. but it is also easy to lose the thread. and it always takes longer time, I mean, when I search for something online it always takes longer because you get lots during the search" - Ashley
	39	She likes the convenience of buying things online	"In less than an hour, I was able to look everything (highlighted) for all the options, and I chose the best one, with the best delivery time and price, and that was it" – Leslie
	40	Brand mitigates the uncertainty of buying things online	"I'm just not confident about the buying things online if it's an item, a brand that I've never worn." - Kevin
Product knowledge increase	41	Feels like a specialist in things s/he likes to browse. s/he even sees herself as a reference for peers in products s/he browsed.	"Once I started browsing for diamonds, I don't know, my boyfriend told me to pick one, but I didn't know anything about it, so I started to browse for diamonds, and then I learned lots of things, how you see the purity, the types, oh there is the "L", the "S", "G", categories, things like that." - Kelly
	42	Reports to be aware of specificities in the websites s/he browses	"I know that everyday at 8 am they release all the new campaigns, so I know everyday at 8 there are news things there." – Suzette
	43	Product knowledge is a positive outcome from browsing (more online, but also offline) that is very much appreciated.	"I like to see things, and I go like, "Hum this is leather", "this isn't", I like to see the fit, how they are cut." – Alex
Relationship with peers	44	Reports a sense of pride because s/he is seen as a reference to peers in products s/he likes to browse.	"I actually print my cellphone screen and send to my friends, telling them 'Hey look at this, it will look good on you, and it is on a great price', this is something I do it all the time and I love doing it" - Alex
	45	Keep track and organize all products and services found in online browsing - to use or recommend to peers	"I select everything I like, I go and save in those, you know, Instagram folders, then when I need them, they are there, all of them lovely." - Lauren
	46	Browse online after recommendation from peers	"I always go after recommendation because I never know anything so I ask." - Ursula
Journey in online browsing	48	Comments about the flow of the process in online browsing, mimic of a journey	"There are a lot of things that I like when I am browsing online, what I do, what I usually do, is add it to my cart, and save it there, so when I go back I remember about this product" – Lauren
	49	Comments about the flow of the process in offline browsing, mimic of a journey	"I usually go to a physical store to know more about a product, because salespeople might have good, more information, then I go there just to know more about a product. I rarely buy when I go, if I buy, I do it online later". – Kelly

- Motivation for browsing:** In this topic, interviewees reported what led them to browse—either online or offline. COB may occur intentionally or unintentionally, with the latter being more common. Interviewees reported that social media, especially Instagram, tends to lead them to click through to pages of products, stores, and brands, so that they unintentionally spend time online browsing. Product interest drives their decision to click and start online browsing: the interviewees said that they tend to click only on products they are interested in, so that even if they lose track of time, it is essentially a positive experience. COB may happen intentionally as well. The interviewees said that they engage in it when they need to relax or distract themselves before starting an activity, or right after a lunch break. A few respondents said they browse the apps or websites of stores on a daily basis; however, this will be discussed as a separate topic. Offline, browsing is more intentional as it is necessary to physically go to a mall or store to browse offline. Interviewees that reported doing so do it in their free time, usually during the weekend or in-between tasks (e.g., when waiting for their children to finish school).
- Offline browsing characteristics:** In this topic, interviewees discussed the characteristics of offline browsing behavior, such as the presence of salespeople, which inhibits browsing behavior as they reported feeling pressured by salespeople to buy things, and do not feel comfortable browsing through products the way they want to. In addition, in offline browsing it is necessary to plan ahead regarding the time needed to get to the mall (or store) and return home or to work. For that reason, offline browsing is mainly intentional. Many interviewees said they used to go to the mall and walk around, browsing, when they were younger, but now do not have time for this, and thus primarily go to stores with specific goals in mind. Another relevant characteristic is that offers on products and brands are limited to stores that actually carry these offers in the region in which the person lives. Interviewees also mentioned that they usually go to the same stores, so the browsing experience is more limited than online. Some interviewees mentioned the need to try on clothes before buying, so even if they see something online that they like, they need to go to the physical store to try it on and buy it. At the same time, other interviewees said that they often find products they like in the physical store, try them on, but buy them online, because of price differences. Interviewees also reported “special-occasion” browsing. This occurs in two forms. One is when they have a product related to a special interest, such as a book or cooking device, for which they plan ahead to browse for this specific product, as a special

occasion that is pleasurable. The second case pertains to travel. Some interviewees reported that they browse offline when they are travelling because this is a good way to get to know a place, and is also when they have more free time, and can enjoy the experience more.

- **Online browsing characteristics:** The extensive selection of products and brands was mentioned as a key factor that leads interviewees to engage in COB. Some interviewees mentioned that they like the fact that when they browse online they have control over the experience, can spend as much time as they want looking at products, and can visit the website multiple times. They can also see details of the product and easily compare it with others. The convenience that is offered via online shopping was also mentioned as a relevant characteristic of the COB experience. Some interviewees felt that there are too many options, which makes the browsing experience more complex. An interesting detail that was mentioned by some interviewees pertains to the role of the brand in mitigating uncertainty in the online context. They said that when they know the brand, they are more likely to want to buy the product because they are familiar with the quality and fit of the product.
- **The entertainment function of browsing:** Almost all interviewees agreed that browsing is fun. The few (4 out of the 19 interviewees) that mentioned they do not like it were those who dislike all activities related to shopping. Some even hire professionals to do this job for them. Those who enjoy browsing tend to do so in their free time, when they are travelling, or between tasks. Some interviewees also mentioned that they like finding good deals, and enjoy the thrill of finding good opportunities during shopping, so they appreciate the time they spend browsing more when they are browsing for discounts.
- **Compulsive behavior in browsing:** Even though browsing is part of the first stage of the buying process, when product definition is not even clear yet, there were some cases that fit into the classification of compulsive behavior. One interviewee mentioned that she browses every day on a specific app. This forms a sort of a ritual; she knows when new products are released, and she plans to open the app and browse through all new products, even those for which she has no intention to purchase at all. Whenever she cannot browse, she feels anxious because she thinks she might lose out on a good opportunity. Interestingly, she reported rarely buying from the app, and noted that she had not realized that fact until she participated in the interview. The characteristics noted

by this interviewee are consistent with compulsive behavior (Hirschman, 1992; O'Guinn & Faber, 1989).

- **Impulsive buying and browsing:** An interesting characteristic that differentiates online from offline browsing pertains to impulsive buying. Interviewees reported that they conduct most impulsive buying offline because in offline browsing they have less control over the experience, undergo a multisensory experience in the store, feel pressured to buy by the presence of salespeople, and have only a short time in which to decide which product to buy. During online browsing, consumers have control over adding and excluding products from their shopping cart, and have time to think about whether they will buy the product. Some interviewees mentioned that the fact that they have to stop and type in delivery and payment information gives them time to really think about whether they want to buy the product, and this is when they decide against the purchase. They said that this is why impulsive buying occurs rarely online, while they reported often buying impulsively offline.
- **Journeys in browsing:** This topic was present in all interviews, as it relates to the concept of the journey within the browsing experience. Here, interviewees mentioned how their browsing evolves into a buying process, or a closer relationship with a product or brand they did not have before. This journey often mixes the online and offline environments, as consumers often access multiple platforms in their browsing experience. Most comments on this referred to the online browsing journey, as interviewees typically go online when researching a product. A regular journey starts with little knowledge of a product, and ends with purchase, or with accumulated knowledge, thereof. For example, interviewee Kelly mentioned that her boyfriend told her he wanted to give her a jewel and asked her which one she would like. She realized she did not know much about it, so she started browsing. She focused on diamonds, and reported that she became obsessed with the topic, ending up knowing all about the specifics of diamonds market, and even considering taking specific courses on the subject, all before actually deciding on which diamond to get. She appreciated the knowledge she acquired, and the decision to buy was very smooth and rational thanks to the entertainment aspect of exploring the dimensions of the product.
- **Negative outcomes of browsing:** Interviewees reported several negative outcomes of browsing behavior. For example they reported that they often lose track of time when they are browsing. This happens more online, because when browsing offline they reported having more control over the time they have for the activity. This perception

of losing track of time sometimes leads them to feel frustrated, wishing they had used that time to do other activities. One other negative outcome is anxiety. This may be triggered either when interviewees feel they have missed out on opportunities because they have not engaged in browsing (mostly online, in this case), or when they are browsing for high-priced products, such as mobile phones or furniture, which makes them think about the money they will have to spend. There is one negative outcome that is exclusive to COB: some interviewees reported feeling uncomfortable because they suspect that their online browsing is not private; they start receiving information about products browsed and sites visited, which is a cause for concern.

- **Positive outcomes of browsing:** Interviewees also mentioned several positive outcomes of browsing. For example, some interviewees said that browsing gives them inspiration either for creating new products, better understanding the market they work in, or finding new ways to create their products. Some interviewees even mentioned that browsing makes them aspire to improve their lives, because they browse for products that are out of their consumption possibilities at the moment and use these products as goals to improve their consumption habits through a more prosperous life. The amount of information consumers access through browsing empowers them to make better purchase decisions and was also mentioned as a positive outcome. Serendipitous findings are also a compelling positive outcome; almost all interviewees mentioned discovering new brands or products that, once they start to consume them, are a positive addition to their lives. This happens mostly via online browsing, as consumers tend to go to previously known stores for offline browsing. Some interviewees also mentioned the feeling of relaxation obtained from browsing.
- **Product knowledge increase:** This is a positive outcome that I decided to treat separately, since it is a relevant outcome for consumer behavior. Interviewees mentioned learning about products through browsing. After browsing, they know more about the characteristic of products and are able to make better purchase decisions. Some mentioned feeling they become specialists in specific products they have browsed for. The interviewees appreciate this acquired knowledge, and thus attribute positive feelings to the browsing experience.
- **Relationship with peers:** Some interviewees mentioned that they appreciated the browsing experience because they feel they can be seen as a reference point to peers, being consulted about products or services they have earned knowledge about through browsing. Two interviewees even mentioned keeping track of the products and services

they browsed for, organizing such information in order to make suggestions to colleagues and friends in the future. On the other side, some interviewees said that they browse after receiving recommendations from peers, using other consumers' expertise as guides to drive their browsing experience.

- **Conscious consumption:** Interviewees mentioned the topic of conscious consumption spontaneously, without being prompted. This concern relates to buying too much. Interviewees often mentioned wanting to reduce their consumption because of the environment, or because they want to adopt a more minimalistic way of life. This topic appeared in almost all interviews, always organically. One possible explanation for this is that the interview made interviewees think about their browsing behavior and consumption patterns, raising the question of conscious consumption in their minds. Some mentioned wanting to reduce their consumption to make better use of the money they spend, while others mentioned wanting to make better use of what they already own.

Tables 8, 8a, 9 and 9a list all themes discussed in the 19 exploratory interviews, with the objective of presenting how the themes were distributed amongst the interviews. The most relevant themes are highlighted in bold.

Table 8 Themes discussed during the first 10 interviews. Text in bold indicate the most relevant themes

Kelly	Ashley	Sioban	Suzette	Jasper
Love shopping and browsing	Browse offline when travels	Intentional COB	Online buying is convenient	High involvement with product leads to COB
High involvement with product leads to COB	High involvement with product leads to COB	High involvement with product leads to COB	Needs to try on clothes	Incidental COB through social media
Incidental COB through social media	Online has too many options	Feel like a specialist in products they browse for	Incidental COB through social media	Feel like a specialist in products they browse for
Browsing is fun and do it whenever is possible	Feel frustrated	Compulsive browsing behavior	impulsive buying offline	Browse offline when travels

impulsive buying offline	COB to avoid tasks	Feel anxious	Lose track of time	Impulsive buying regrets
Don't like salespeople	Incidental COB through social media	Feels inspired	Feel frustrated	Feels inspired
Feel like a specialist in products they browse for	Serendipity findins in browsing	Knows specific details of the websites they browse	Impulsive buying regrets	Define themselves as conscious shopper
Like the control offered in COB	Don't like salespeople	Lose track of time	Compulsive browsing behavior	Prefer to spend money on experiences
Aware of conscious consumption	Like the control offered in COB	Define themselves as conscious shopper	Feels inspired	Strategies to make better use of money
knows more about product due to COB	knows more about product due to COB	Serendipity findins in browsing	Offline time demands previous planning	Online Browsing journey
Browsing gives inspirations to work	Browsing gives inspirations to work	Lose track of time	Browse online, buy offline	
Serendipity findins in browsing	Impulsive buying regrets	Online Browsing journey	Online Browsing journey	
Feels relaxed	Lose track of time	Online Browsing journey		
Lose track of time	impulsive buying offline			
Feel proud to be able to give recommendation to peers	Online Browsing journey			
Online Browsing journey				

Table 9a Themes discussed during the first 10 interviews. Texts in bold indicate the most relevant themes

Ezra	Georgia	John	Rock	Tilda
High involvement with product leads to COB	High involvement with product leads to COB	Incidental COB through social media	High involvement with product leads to COB	Incidental COB through social media
Incidental COB through social media	Incidental COB through social media	impulsive buying offline	Don't like salespeople	Don't like salespeople
Browsing is fun and do it whenever is possible	knows more about product due to COB	Don't like salespeople	Feel like a specialist in products they browse for	Like the control offered in COB
Feel like a specialist in products they browse for	Browsing gives inspirations to work	Aware of conscious consumption	knows more about product due to COB	Aware of conscious consumption
Like the control offered in COB	Serendipity findings in browsing	Browsing gives inspirations to work	Serendipity findings in browsing	Browsing gives inspirations to work
knows more about product due to COB	Lose track of time	Serendipity findings in browsing	Feels relaxed	Serendipity findings in browsing
Serendipity findings in browsing	Feel frustrated	Lose track of time	Browse offline when travels	Feel frustrated
Feels relaxed	Needs to try on clothes	Feel frustrated	Compulsive browsing behavior	Impulsive buying regrets
Lose track of time	Go to the same stores offline browsing	Impulsive buying regrets	Feel anxious	Compulsive browsing behavior
Feel frustrated	Few stores to offline browsing	Feel anxious	Feels inspired	Define themselves as conscious shopper
COB to avoid tasks	Browse online, buy offline	Browse online, buy offline	Online buying is convenient	Needs to try on clothes
Intentional COB	Online Browsing journey	Go to the same stores offline browsing	Needs to try on clothes	Strategies to make better use of money

Compulsive browsing behavior		Few stores to offline browsing	Likes to browse for discount	Go to the same stores offline browsing
Knows specific details of the websites they browse		Likes to browse for discount	Hates shopping	Likes to browse for discount
Define themselves as conscious shopper		Online Browsing journey	Go to the same stores offline browsing	Browsing empower consumers
Needs to try on clothes			Offline browsing in special occasion	Feel anxious for spending money
Browsing give aspiration to pursue a better life			Online Browsing journey	Buy things for family, prefer online
Hates shopping				Online Browsing journey
Feel spied when online browsing				
Online Browsing journey				

Table 10 Themes discussed during the last nine interviews. Texts in bold indicate the most relevant themes

Kevin	Kenneth	Ursula	Leslie	Lauren
knows more about product due to COB	Online buying is convenient	High involvement with product leads to COB	High involvement with product leads to COB	High involvement with product leads to COB
Serendipity findings in browsing	Needs to try on clothes	Incidental COB through social media	Incidental COB through social media	Incidental COB through social media
Online buying is convenient	Offline time demands previous planning	Browsing is fun and do it whenever is possible	impulsive buying offline	Browsing is fun and do it whenever is possible

Needs to try on clothes	Strategies to make better use of money	impulsive buying offline	Feel like a specialist in products they browse for	Feel like a specialist in products they browse for
Prefer to spend money on experiences	Hates shopping	Like the control offered in COB	knows more about product due to COB	Aware of conscious consumption
Hates shopping	Offline browsing in special occasion	Aware of conscious consumption	Serendipity findings in browsing	knows more about product due to COB
Feel spied when online browsing	Brand mitigates uncertainty in online	knows more about product due to COB	Feels relaxed	Browsing gives inspirations to work
Brand mitigates uncertainty in online	Hire someone to shop	Serendipity findings in browsing	Feel proud to be able to give recommendation to peers	Serendipity findings in browsing
Browse after recommendation from peers	Feel embarrassed offline browsing	Feels relaxed	Online has too many options	Lose track of time
Online Browsing journey	Browse after recommendation from peers	Lose track of time	Feel frustrated	Feel proud to be able to give recommendation to peers
	Online Browsing journey	Browse offline when travels	Impulsive buying regrets	Browse offline when travels
		Feel frustrated	Compulsive browsing behavior	Feel frustrated
		Impulsive buying regrets	Needs to try on clothes	Intentional COB

		Compulsive browsing behavior	Offline time demands previous planning	Compulsive browsing behavior
		Feels inspired	Likes to browse for discount	Online buying is convenient
		Online buying is convenient	Offline browsing in special occasion	Browsing give aspiration to pursue a better life
		Needs to try on clothes	Browsing empower consumers	Browsing empower consumers
		Offline time demands previous planning	Feel anxious for spending money	Feel spied when online browsing
		Go to the same stores offline browsing	Feel spied when online browsing	Brand mitigates uncertainty in online
		Likes to browse for discount	Online Browsing journey	Organize information collected in COB
		Browsing empower consumers		Buy things for family, prefer online
		Online Browsing journey		Online Browsing journey

Table 11a - Themes discussed during the last nine interviews. Texts in bold indicate the most relevant themes

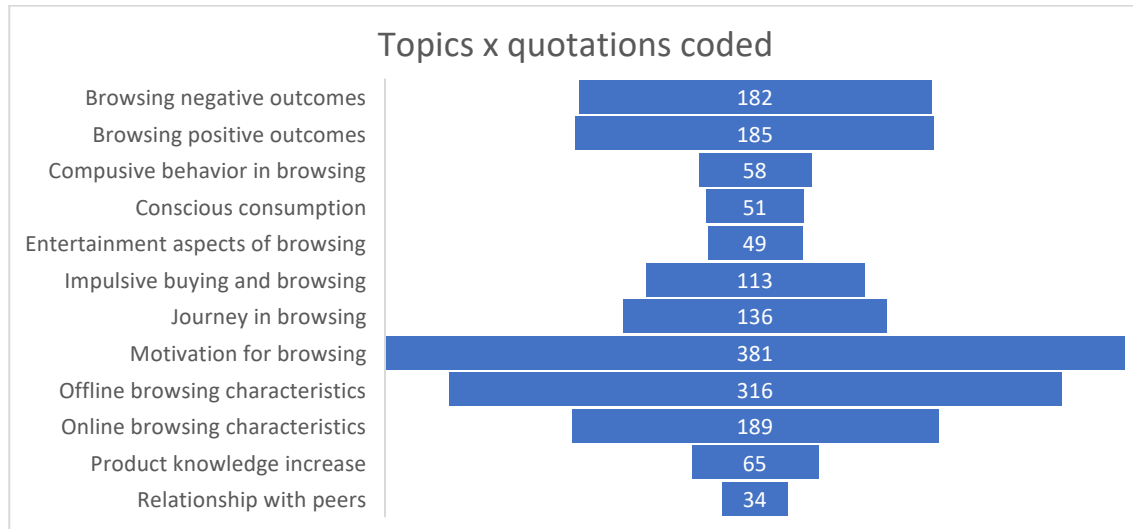
Paul	Alex	Erin	Polly
Define themselves as conscious shopper	High involvement with product leads to COB	Incidental COB through social media	High involvement with product leads to COB
Online buying is convenient	Browsing is fun and do it whenever is possible	Browsing is fun and do it whenever is possible	Incidental COB through social media
Needs to try on clothes	impulsive buying offline	Like the control offered in COB	Browsing is fun and do it whenever is possible
Prefer to spend money on experiences	Don't like salespeople	knows more about product due to COB	impulsive buying offline
Hates shopping	Feel like a specialist in products they browse for	Serendipity findings in browsing	Don't like salespeople
Feel spied when online browsing	Aware of conscious consumption	Lose track of time	Feel like a specialist in products they browse for
Browse after recommendation from peers	Browsing gives inspirations to work	Browse offline when travels	Like the control offered in COB
Online Browsing journey	Serendipity findings in browsing	Feel frustrated	Browsing gives inspirations to work
	Lose track of time	Intentional COB	Serendipity findings in browsing
	Feel proud to be able to give recommendation to peers	Compulsive browsing behavior	Feels relaxed

	Feel frustrated	Feels inspired	Lose track of time
	COB to avoid tasks	Define themselves as conscious shopper	Feel proud to be able to give recommendation to peers
	Intentional COB	Online buying is convenient	Feel frustrated
	Compulsive browsing behavior	Offline time demands previous planning	COB to avoid tasks
	Feel anxious	Go to the same stores offline browsing	Impulsive buying regrets
	Knows specific details of the websites they browse	Likes to browse for discount	Intentional COB
	Browsing give aspiration to pursue a better life	Offline browsing in special occasion	Compulsive browsing behavior
	Likes to browse for discount	Feel spied when online browsing	Feels inspired
	Browsing empower consumers	Buy things for family, prefer online	Knows specific details of the websites they browse
	Feel anxious for spending money	Online Browsing journey	Organize information collected in COB
	Online Browsing journey		Online Browsing journey

Table 10 presents the number of times each topic was mentioned by each interviewee. Figure 3 presents the quantity of coded quotes for each of the 12 topics.

Table 12 Number of times each topic was mentioned by each interviewee

	Negative outcomes of browsing	Positive outcomes of browsing	Compulsive behavior in browsing	Conscious consumption	Entertainment function of browsing	Impulsive buying and browsing	Journey in browsing	Motivation for browsing	Offline browsing characteristics	Online browsing characteristics	Product knowledge increase	Relationship with peers	Total
Alex	18	21	8	4	5	8	13	35	21	24	9	7	173
Ashley	17	12	2		1	6	3	19	8		1	1	70
Erin	9	13			7	7	7	35	24	18	3	1	124
Ezra	13	15	6		4	2	11	7	3	1	4	1	67
Georgia	8	8	3		1	5	3	9	14	3		1	55
Jasper		3		4		5	8	16	3	1			40
John	7	5		2		4	3	13	29	1	1		65
Kelly	12	28	4	10		16	23	55	45	39	14	6	252
Kenneth	12	2			6	2	1	3	13	3			42
Lauren		20				5	17	16	4	6	9	5	82
Leslie	11	3	6	5	2	7	5	30	34	19	7		129
Paul	3	2		4	4		2	12	5	4			36
Polly	7	9	5		8	9	5	11	4	5	5	6	74
Rock	6	12	1		4	3	3	27	18	15	4	1	94
Sioban	11	11	9	5	3	2	10	21	8	10	3	1	94
Suzette	10	4	8	2	3	7	7	12	19	8	3		83
Tilda	24	13	1	14		20	9	33	49	22	2		187
Ursula	14	4	5	1	1	5	6	27	15	10		4	92
Total	182	185	58	51	49	113	136	381	316	189	65	34	1759

Figure 3 Quotations coded per topic

5.2. Discussion

This study presented a several relevant information related to COB behavior. From all the topics that was discussed previously, it is important to highlight the fact that COB offer unique conditions that makes it a distinct behavior. Some interviewees reported that they intentionally engage in COB everyday, just for fun, and included that activity in their daily routine. Some even mentioned feeling anxious or frustrated when they were not able to browse. This is a characteristic that is part of the compulsive behavior, and it is an indication that browsing may be a compulsive behavior, as it was suggested in the discussion presented in Chapter 2 of this dissertation.

From the positive outcomes of COB it is important to highlight that COB was reported by interviewees as a way to hope for a better life, using COB as a tool to improve their consumption patterns. Also, COB was mentioned as a way to find inspiration to help their job, either by creating new products, or presenting things in a different manner. The issue of sustainable consumption was spontaneously reported by interviewees, and it can also be a positive outcome for COB, if taking into account the society at large. From the negative

outcomes of COB the losing track of time while COB and reluctance to stop COB behavior and return to their obligations may have negative consequences for consumers. In the next study, the findings of this exploratory study are discussed in detailed, as it was used as the basis for constructing testable proposition to showcase the distinctiveness of COB behavior.

6. Study 2: Experimental survey

In order to test whether the information collected in the exploratory interviews could be used as a way to distinguish COB from offline browsing, I designed a survey to test whether the aspects that emerged as distinctive between COB and offline browsing during analysis of the exploratory interviews indeed significantly differ from each other. To execute this analysis, it was necessary to translate the topics that emerged from the interviews into DVs that could be tested in both conditions: COB and offline browsing. In the following section I present the DVs of the experiment and discuss the ways in which these relate to the topics from the previous study. I then discuss the survey design, measures, and results.

6.1. Dependent variables

After analyzing the topics that emerged from the exploratory interviews, I was able to define 20 different variables that might demonstrate specific differences between the concepts of COB and offline browsing. It is important to highlight that not all topics and themes that emerged from the interviews were eligible as possible discriminators between COB and offline browsing behavior; any that did not qualify in this regard were excluded.

Below, I explain each of the 20 DVs. For each DV I include the sentence used in the survey; this definition could be used when respondents considered online or offline scenarios. All were posed in the first person, and in the form of an affirmation, as respondents were asked to select their degree of accordance with the sentences on a 7-point Likert scale.

- Like to browse—in the topic “entertainment function of browsing” (themes 17, 19, and 47), a positive perception of browsing was directly related to whether the individual likes to shop, which may be reinforced after the browsing experience per se. Although consumers that like to shop may enjoy browsing equally in both contexts (offline and online), the fact that offline demands planning, physical displacement, time, and

financial costs makes it less likely to be enjoyable than COB. Most of the interviewees mentioned this, connecting offline browsing with something they did when they were younger, or when they had free time. I therefore propose “like to browse” as a possible characteristic that distinguishes online than offline browsing, as consumers engage more in online browsing and tend to enjoy the experience more. To assess this DV I used the sentence: “I like to browse, just looking around without a particular goal in mind.”

- Lose track of time—in the topic “negative outcomes of browsing” (theme 1), the perception of losing track of time was expressed more for COB than for offline browsing. It is also expected that for offline browsing consumers need to allocate time to go to the store, which could incentivize them to control and keep track of time, while in COB this is not the case as consumers can start or stop browsing in seconds. Therefore, losing track of time is also a possible discriminator. To assess this DV I used the sentence: “I often end up spending more time browsing than I would have liked.”
- Ease and variety—in the topic “online browsing characteristics” (themes 34 and 38), interviewees reported that the ease of going from one store to another, as well as the variety, in the online environment is completely different than in offline scenarios, where offers are limited by the available shops. The variety of products offered and the ease of accessing these products also appears to be a clear discriminator between the online and offline browsing experience. To assess this DV I used the sentence: “I can quickly and conveniently look at a large variety of products/services.”
- Serendipitous findings—Amongst the “positive outcomes of browsing” (theme 7), serendipitous findings were an interesting discriminator between COB and offline behavior. The concept of serendipity has been investigated in the information search literature in terms of discoveries that people come across by chance (Agarwal, 2015). It is usually connected to the scanning stage of information search, where individuals are perusing various sources of information (Wilson, 2002)—an activity that is similar to the “looking around” component of browsing behavior. Indeed, Wilson (2002) named the scanning stage the browsing stage and stated that this where serendipitous findings may occur more frequently. Recently some studies have focused on the taxonomy and theory related to serendipitous findings in information behavior literature (e.g., Agarwal, 2015), where serendipity may be defined as “encountering or stumbling upon information when not directly looking for it” (Agarwal, 2015). Interviewees also connected serendipitous findings with products they like to browse for, suggesting a

connection with the entertainment function of browsing discussed above. The interviewees stated that they tend to experience and visit unknown products and brands more during COB because they often discover such products during their browsing activity. This is less likely to happen during offline browsing, since consumers usually go to the same stores, and their browsing is limited to what is around them, while online there are no barriers to their exploratory behavior. To assess this DV I used a sentence that describes what serendipity is, instead of using the word serendipity, for simplicity: “My chances of unexpectedly stumbling upon products/services I would actually consider purchasing are high.”

- Impulsive buying—the topic “impulsive buying and browsing” (themes 23 and 24) presents another possible discriminator between COB and offline browsing behavior. Almost all respondents affirmed that impulsive buying happens only in the offline context. The reasons they mentioned for this were mainly due to the pressure they feel to buy from salespeople, the lack of control over their actions due to the multisensory aspects of retail, and also the ease of paying for and receiving the product (immediate gratification). In the online context they feel more in control of the activity and feel no pressure to purchase. Some interviewees also mentioned that the fact that they have to type in payment and delivery information gives them time to consider and perhaps decide not to buy. Thus, impulsive buying is another possible discriminator. To assess this DV I used the sentence: “I may end up purchasing something on an impulse.”
- More product knowledge—The topic “product knowledge increase” (themes 41, 42, and 43) is a positive outcome of browsing that interviewees reported experiencing more in the online context due to the amount of information available there. Such knowledge can also be gained in the offline context, but the interviewees stated that they gain more knowledge online than offline. The perception of product knowledge is a relevant variable for consumer behavior, as it empowers consumers to make better choices and to become sources of information amongst peers (Thong & Hong, 2005; Shim et al., 2001). To assess this DV I used the sentence: “I feel more knowledgeable about products/services as a result of browsing.”
- Planned activity—One of the “offline browsing characteristics” (themes 32 and 35) is that browsing demands previous planning; therefore, this is another possible discriminator between COB and offline browsing behavior. To assess this DV I used the sentence: “Browsing is typically a planned activity.”

- Unplanned buying—In the topic “offline browsing characteristics” (theme 29) there is a possible discriminator that is similar to impulsive behavior—unplanned buying. This activity relates to something that was not purchased as an impulse but was not previously planned. Interviewees reported that unplanned buying happens mostly in the offline context, due to the same reasons related to impulsive buying. To assess this DV I used the sentence: “I sometimes end up purchasing something even though I had no intention of buying anything when I started browsing.”
- Distraction from unwanted tasks—in the topic “motivation for browsing” (themes 2 and 28) browsing was discussed as a way to distract from performing unwanted tasks. As offline browsing demands time and previous planning, it is expected that this happens less often in the offline than in the online context, where browsing can be started and ended quickly; therefore, this is another possible discriminator between COB and offline browsing. To assess this DV I used the sentence: “I often browse to distract myself from less desirable tasks.”
- Reward—Connected to the topic “entertainment function of browsing” (themes 18, 26, 35, and 47), the characteristic of feeling positive after browsing as a way to reward oneself was mentioned as a positive outcome for those who enjoy shopping, including shopping for a specific product. This is a possible discriminator between COB and the offline context because interviewees mentioned the ease with which COB can be undertaken, and the difficulty of finding time for offline browsing. To assess this DV I used the sentence: “I often browse to reward myself for accomplishing something.”
- Embarrassment—In the topic “offline browsing characteristics” (themes 36 and 37), it emerged from the interviews that when browsing offline, interviewees experience embarrassment about browsing for specific products, while online this does not occur. To assess this DV I used the sentence: “I feel embarrassed when browsing certain products or services.”
- Relaxation—Relaxation was another reported positive outcome of browsing (theme 8) for either online or offline contexts, but as COB tends to happen more often, consumers may connect relaxation more to COB than to offline browsing. To assess this DV I used the sentence: “Browsing makes me feel relaxed.”
- Confidence—As browsing allows consumers to obtain more information about products and brands, confidence is another positive outcome of browsing (theme 11). It may occur online or offline, but during COB information is easier to access and more

extensive, so the connection to confidence may be stronger in the COB condition. To assess this DV I used the sentence: “Browsing gives me confidence.”

- Pressure to buy—One of the most frequently mentioned offline browsing characteristics (theme 29) was the presence of salespeople making interviewees feel pressured to buy. This is another potential discriminator for COB, as it is more likely to occur offline. To assess this DV I used the sentence: “I experience pressure to buy.”
- Joy—Some interviewees reported deriving joy from the browsing activity, and this is also consistent with the entertainment function of browsing (themes 17, 18, 30, and 47), as joy is a positive sentiment. As it is easier to browse online than offline, this may also be a discriminator. To assess this DV I used the sentence: “Browsing brings me joy.”
- Hope—One unanticipated positive outcome of browsing (theme 10) was the feeling of hope, or aspiration for a better life, that some interviewees connected with browsing. They attributed this feeling to imagining achieving higher standards of consumption. As COB is easier to engage in than offline browsing, this is another possible discriminator. To assess this DV I used the sentence: “Browsing brings me hope.”
- Losing track of time—As mentioned earlier, losing track of time is a negative outcome of browsing (themes 1 and 2), but sometimes this is more a feeling than an actual losing track of time. Therefore, I included the following sentence to assess this DV: “I feel like I lose track of time when I browse.”
- Reluctance to return to a task—some interviewees reported that they engage in browsing to avoid performing unwanted tasks, but sometimes they lose control over their actions, and feel reluctant to stop browsing and return to work activities; this is similar to compulsive behavior in browsing (themes 12 and 28). As offline browsing demands planning while COB may happen instantaneously, this represents another potential discriminator. To assess this DV I used the sentence: “I feel reluctant to get back to work-related tasks after browsing”.
- Anxiety—One of negative outcomes of browsing is anxiety (themes 3 and 4), which is usually caused by the possibility of losing out on deals or the impending need to spend large amounts of money. As it is easier to engage in COB this is another potential discriminator. To assess this DV I used the sentence: “I feel anxious while browsing.”
- Frustration—Another negative outcome of browsing is frustration (themes 2 and 13), which is usually caused by losing track of time, or a negative perception of time spent

browsing. As it is easier to engage in COB this is a final potential discriminator. To assess this DV I used the sentence: “I feel anxious while browsing.”

6.2. Experiment Design

To test the possible discriminators, I designed an experimental survey in which respondents were randomly assigned to one of three possible scenarios: online browsing, offline browsing, or information search (control). The scenarios were manipulated, with respondents asked to consider their behavior (online/offline/information search) and indicate on a 7-point Likert scale the extent to which they agreed with the sentences defined for the DVs above.

The experiment started with general orientation information, followed by a description of behaviors related to the three scenarios. This orientation was shown to every respondent:

Many consumers, when asked about their daily activities, report something similar to this:

“I spend quite a bit of time online doing all sorts of things. I complete work-related tasks, I check the news, I connect with others on social media, I look up information on topics that interest me, I research products I might buy sooner or later. I often make purchases online, or just browse without a particularly strong purchase intention, simply looking around. Otherwise, I may meet up with friends after school/work, go to a cafe, or just go to a local shopping center to look around. Occasionally I may even buy something, but not necessarily.”

Distinct sentences were used to manipulate respondents to one of the three scenarios. These manipulation sentences are presented in Table 11.

Table 13 Manipulation used in Study 2

Scenario	Manipulation
Online browsing	“For the following statements, please consider YOUR ONLINE PRODUCT/SERVICE BROWSING BEHAVIOR (i.e., when you are not looking for anything in particular to purchase, but are just looking around shopping sites).”
Offline browsing	“For the following statements, please consider YOUR OFFLINE/PRODUCT/SERVICE BROWSING BEHAVIOR IN STORES (i.e., when you are not looking for anything in particular to purchase, but are just looking around stores/shops).”
Information search (control)	“For the following statements, please consider HOW YOU STAY INFORMED ABOUT THE NEWS (i.e., stay informed about things you are interested in) in a typical week.”

Respondents were asked to rate their agreement with the sentences mentioned for the DVs above. They were then asked to provide demographic and other measures that could be as covariates.

6.3. Measures—Possible covariates

I collected the following demographic information that could serve as covariates in the analysis of the study: age, gender, income, education, online shopping habits, online payment habits. I also included specific scales for concepts that were mentioned in Study 1 that might act as covariates in analyzing the results:

- Obsessive/compulsive and impulsiveness dimensions of compulsive buying scale (Ridgway et al., 2008b): As interviewees reported that they often buy impulsively offline, and not online, this scale could be used to derive covariates in the results of the study. The scale comprises six items in total, three for each dimension.
- Consumer spend self-control (Haws, Bearden, & Nenkov, 2012): 10-item scale.
- Centrality dimension of materialism scale (Dawson & Richins, 1992).
- The internet shopper scale (Donthu & Garcia, 1999)
- The need for touch scale (Peck & Childers, 2003).

6.4. Data collection

Data were collected in October 2019 in the US and Brazil, using the same Qualtrics instrument, only in two different languages (English and Portuguese). In the US, students from Fordham University were recruited to participate in the survey, and randomly assigned to each scenario. In Brazil, data were collected from the Toluna Consumer Panel. I collected 732 responses—235 in the US and 497 in Brazil. From this total, 185 were incomplete, 22 were inconsistent (failed the question where they had to allocate 100% of their behavior), and eight were invalid (same response throughout the entire survey in a short time). This left a total of 517 valid responses—214 from the US and 303 from Brazil.

Data were collected in October 2019 in the US and Brazil, using the same Qualtrics instrument, only in two different languages (English and Portuguese). In the US, students from Fordham University were recruited to participate in the survey, and randomly assigned to each scenario. In Brazil, data were collected from the Toluna consumer panel.

6.5. Descriptive Statistics of the sample

There were 214 valid responses collected in the US and 303 in Brazil, with a total of 517 responses, as it can be seen in Table 12.

Table 14 Participants in US and Brazil survey

Total valid responses					
Scenario	USA		BRAZIL		TOTAL
Online Browsing	73	34%	100	33%	173
Offline Browsing	71	33%	106	35%	177
Control	70	33%	97	32%	167
	214		303		517

As data collected in the US was with students, 99% of respondents in that sample had between 18 and 22 years old. In Brazil, 52% of respondents were 23 to 27 years old, and 42% 18 to 22. Table 13 presents detailed information about age of participants.

Table 15 Age of participants in US and Brazil survey

Age	USA		BRAZIL	
<18	1	0%	2	1%
18-22	212	99%	126	42%
23-27			159	52%
28-32	1	0%	13	4%
> 32			3	1%

In the US 58% of participants were female. In Brazil, 68%. Table 14 presents detailed information about gender of participants.

Table 16 Gender of participants in US and Brazil survey

Gender	USA		BRAZIL	
Male	89	42%	98	32%
Female	124	58%	205	68%
Other	1	0%		0%

In the US 83% of participants have finished high school (as most of participants were current undergraduate students). In Brazil, 34% were bachelors, and 33% associates. Table 15 presents detailed information about education level of participants.

Table 17 Education level of participants in US and Brazil survey

Education	USA		BRAZIL	
High School	177	83%	83	27%
Associate	6	3%	101	33%
Bachelor	30	14%	103	34%
Master	1	0%	11	4%
Doctorate			5	2%

In the US 46% of participants informed an annual household income of more than US\$ 125,000, also something derived from the fact that sample was from undergraduate students from the same university. In Brazil, participants are in the other extreme of the income table: 38% reported an annual household income of less than R\$ 25,000, and 32% between R\$ 25,000 to R\$ 50,000. Table 16 presents detailed information about informed income of participants.

Table 18 Informed income of participants in US and Brazil survey

Income	USA		BRAZIL	
< 25k	24	11%	115	38%
Between 25k and 50k	10	5%	98	32%
Between 50k and 75k	10	5%	37	12%
Between 75k and 100k	30	14%	22	7%
Between 100k and 125k	40	19%	21	7%
> 125k	98	46%	10	3%
no answer	2	1%		

In the US, reading the news (34%) and browse online (23%) were the online and offline habits most informed by participants. In Brazil the same habits prevailed. Table 17 presents detailed information about online and offline habits of participants.

Table 19 Online and offline habits informed by participants in US and Brazil survey

Habits*	USA		BRAZIL
Shop offline	13%		17%
Browse offline	12%		15%
Read the news	34%		26%
Browse online	23%		26%
Shop online	18%		17%

*mean of informed values, sum adds to 100.

In the US 36% of participants reported they buy 50% of their things online, and 33% most of the things online. In Brazil, 31% of participants informed they buy 50% of their things online and 30% most of the things online. Table 18 presents detailed information about shopping habits.

Table 20 Online and offline shopping habits informed by participants in US and Brazil survey

Shopping habits	USA		BRAZIL	
Everything online	20	9%	37	12%
Most online	70	33%	90	30%
50/50	78	36%	95	31%
Most offline	38	18%	63	21%
Everything offline	8	4%	17	6%
no answer		0%	1	0%

In the US 28% of participants reported they spent most of their money offline, and 36% online. In Brazil, 33% of participants informed they spend most of their money online, and 30% 50% of their money online. Table 19 presents detailed information about spending habits.

Table 21 Spending habits informed by participants in US and Brazil survey

Spending habits	USA		BRAZIL	
Everything online	10	5%	21	7%
Most online	78	36%	99	33%
50/50	58	27%	92	30%
Most offline	60	28%	77	25%
Everything offline	8	4%	12	4%
no answer			2	1%

6.6. Results - Dependent Variables

One-way Anova test to check for significant difference amongst the 20 variables (with Bonferroni adjusted confidence interval) selected to showcase Online browsing as a distinctive behavior.

Table 20 presents the significance p value for each variable in the US sample. There is included in the table the mean value for each variable in each scenario, so it is easy to identify where the difference might be. Significant values ($p < 0.05$) highlighted in bold. Online browsing means are higher and in a statistically significant way includes dependent variables: Like to browse ($p < 0.0001$), distraction from tasks ($p < 0.0001$), feel losing track of time ($p = 0.006$), and feel reluctant to return to task ($p = 0.004$), suggesting that online browsing is more fun, a

behavior used to avoid unwanted tasks, where consumers often lose track of time, and even when they realize it, they feel reluctant to stop COB behavior and return to task. Offline browsing means are higher in dependent variables: planned activity ($p < 0.0001$), and unplanned buying ($p=0.001$), showcasing that one of the main characteristic of offline browsing is that it demands previous planning and often lead consumers to engage in buying things they did not plan for. The control scenario where participants were instructed to think about reading the news, dependent variable feel anxious ($p=0.035$) is statistically significant higher, maybe because of the anxiety that consumers feel when accessing all sorts of content online.

Table 22 - p value for each Dependent variable in the US survey

Variable	USA n=214			
	Significance	Mean online	Mean offline	Mean control
Like to browse	0.570	4.97	4.87	4.69
Lose track of time	<0.0001	5.46	4.53	4.27
Easiness and variety	0.096	5.64	5.28	5.73
Serendipity findings	0.095	4.97	4.76	4.40
Impulsive buying	0.214	4.73	4.79	4.29
More product knowledge	0.051	5.25	4.75	5.20
Planned activity	<0.0001	3.60	4.86	3.73
Unplanned buying	0.001	4.26	4.77	3.69
Distraction from tasks	<0.0001	5.27	4.04	4.87
Reward myself	0.096	5.07	4.09	4.43
Feel embarrassed	0.405	2.63	2.97	2.90
Feel relaxed	0.100	5.41	5.08	4.97
Feel confident	0.859	4.89	4.79	4.89
Feel pressure to buy	0.075	2.92	3.35	2.79
Feel joy	0.119	5.19	4.92	4.77
Feel hope	0.796	4.25	4.10	4.14
Feel losing track of time	0.006	5.05	4.24	4.54
Feel reluctant to return to task	0.004	4.85	4.06	4.89
Feel anxious	0.035	2.89	3.15	3.59
Feel frustrated	0.266	3.11	3.25	3,56

Table 21 presents the significance p value for each variable in the Brazil sample. There is included in the table the mean value for each variable in each scenario, so it is easy to identify where the difference might be. Significant values ($p < 0.05$) highlighted in bold. Online browsing

means are higher and in a statistically significant way include dependent variable: distraction from tasks ($p=0.015$), suggesting that online browsing is a behavior used to avoid unwanted tasks. In this sample, this was the only dependent variable that presented statistically significant results for online browsing. Offline browsing means are higher in dependent variables: impulsive buying ($p=0.010$), feel embarrassed ($p<0.0001$), feel pressure to buy ($p<0.0001$) and unplanned buying ($p=0.007$), showcasing that one of the main characteristic of offline browsing is that it often lead consumers to engage in buying things they did not plan for, impulsively, often because they feel pressure to buy, or feel embarrassed in some way.

Table 23 p value for each Dependent variable in the Brazil survey

Variable	Brazil n=303			
	Significance	Mean online	Mean offline	Mean control
Like to browse	0.126	5.38	5.28	4.97
Lose track of time	0.332	5.36	5.58	5.29
Easiness and variety	0.376	5.66	5.45	5.68
Serendipity findings	0.189	5.98	5.67	5.80
Impulsive buying	0.010	4.85	5.40	4.69
More product knowledge	0.134	5.40	5.20	5.57
Planned activity	0.416	4.57	4.84	4.75
Unplanned buying	0.007	4.55	5.30	4.86
Distraction from tasks	0.015	5.46	4.82	5.08
Reward myself	0.524	5.07	5.08	5.31
Feel embarassed	<0.0001	2.57	3.63	2.64
Feel relaxed	0.079	5.32	5.10	5.52
Feel confident	0.139	5.32	5.13	5.45
Feel pressure to buy	<0.0001	3.14	4.30	3.21
Feel joy	0.963	5.60	5.57	5.61
Feel hope	0.937	5.41	5.38	5.44
Feel losing track of time	0.390	4.52	4.28	4.22
Feel reluctant to return to task	0.749	4.55	4.40	4.40
Feel anxious	0.223	4.88	4.67	4.46
Feel frustrated	0.948	3.61	3.63	3.56

Table 22 presents the significance p value for each variable for the sum of the US and Brazil samples. As the survey was exactly the same, it is possible to combine the samples. Total participants with these two samples is 517. There is included in the table the mean value for each variable in each scenario, so it is easy to identify where the difference might be. Significant values ($p < 0.05$) highlighted in bold. Online browsing means are higher and in a statistically significant way includes dependent variables: lose track of time ($p = 0.012$), distraction from tasks ($p < 0.0001$), and feel losing track of time ($p = 0.006$), suggesting that online browsing is a behavior used to avoid unwanted tasks, where consumers often lose track of time. More product knowledge ($p = 0.014$), feel reluctant to return to task ($p = 0.043$), and easiness and variety ($p = 0.049$) are dependent variables that are higher for online browsing and control (reading the news) showing that consumers relate acquiring product knowledge in a large variety of content that is easy to navigate in, which captures their attention and they feel reluctant to return to tasks in online – either browsing or reading the news – more than in offline. Offline browsing means are higher in dependent variables: impulsive buying ($p = 0.005$), feel embarrassed ($p < 0.0001$), feel pressure to buy ($p < 0.0001$), planned activity ($p < 0.0001$), and unplanned buying ($p = 0.001$), showcasing that one of the main characteristic of offline browsing is that it demands previous planning and often lead consumers to engage in buying things they did not plan for, due to impulsive behavior or because they feel pressure or embarrassed to.

Table 24 p value for each Dependent variable in US and Brazil survey

Brazil + USA n=517				
Variable	Significance	Mean online	Mean offline	Mean control
Like to browse	0.080	5.21	5.12	4.83
Lose track of time	0.009	5.40	5.16	4.86
Easiness and variety	0.049	5.65	5.35	5.70
Serendipity findings	0.091	5.55	5.31	5.22
Impulsive buying	0.005	4.80	5.16	4.52
More product knowledge	0.014	5.34	5.02	5.41
Planned activity	<0.0001	4.16	4.85	4.32
Unplanned buying	<0.0001	4.43	5.09	4.27
Distraction from tasks	<0.0001	5.38	4.51	4.99
Reward myself	0.695	5.07	4.93	4.94
Feel embarrassed	<0.0001	2.60	3.37	2.75
Feel relaxed	0.145	5.36	5.09	5.29
Feel confident	0.227	5.14	4.99	5.22
Feel pressure to buy	<0.0001	3.05	3.92	3.03
Feel joy	0.421	5.43	5.31	5.26
Feel hope	0.939	4.92	4.86	4.90
Feel losing track of time	0.012	4.75	4.27	4.35
Feel reluctant to return to task	0.043	4.68	4.26	4.60
Feel anxious	0.961	4.04	4.06	4.10
Feel frustrated	0.686	3.40	3.48	3.56

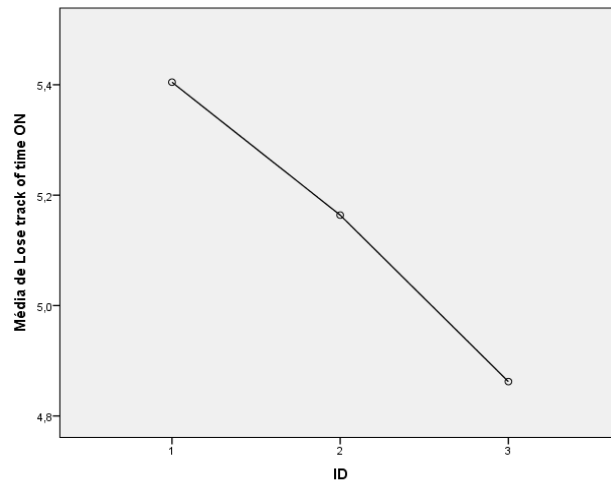
6.7. Running contrasts

The figures below presents the graphs for the 11 variables that presented statistically significant differences amongst the scenarios. Scenario 1 is online browsing, 2 is offline browsing, and 3 is control (reading the news).

As expected, “Lose Track of Time” was significantly ($p=0.002$) more present in the online browsing (mean = 5.4) if we compare it with the control scenario (reading the news, mean =4.86). In the offline context (mean = 5.16), there was a somewhat significant difference ($p=0.087$) in comparison with the control scenario. We expected a significant difference in the online x offline scenarios, but that did not happen ($p=0.167$), maybe because losing track of

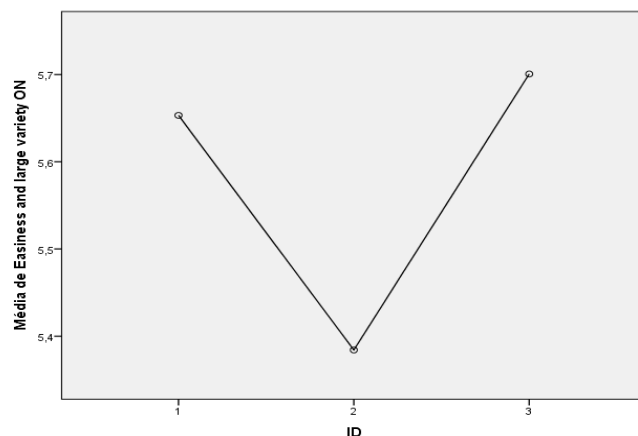
time is something that consumers recall in both context. Figure 4 presents a graphic representation of the contrasts in the three different scenarios.

Figure 4 Contrasts on dependent variable Losing track of time



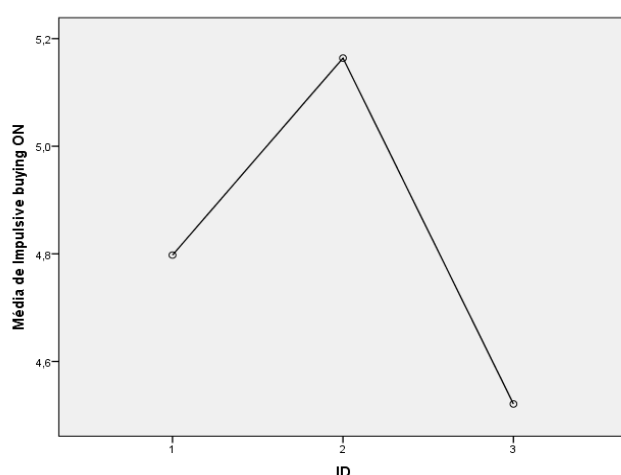
In the “Easiness and Variety” variable, we expected to find significant differences between the online x offline scenarios, but that was somewhat significant ($p=0.074$) but in the right direction, as we expected that respondents would find more variety and easiness in the online environment (online 5.65 > offline 5.35). In the control scenario, reading the news, where there is a mix of online and offline component in reading the news, we found a significant difference ($p=0.023$) between control (mean 5.7) x offline context (5.35). Figure 5 presents a graphic representation of the contrasts in the three different scenarios.

Figure 5 Contrasts on dependent variable Easiness and Variety



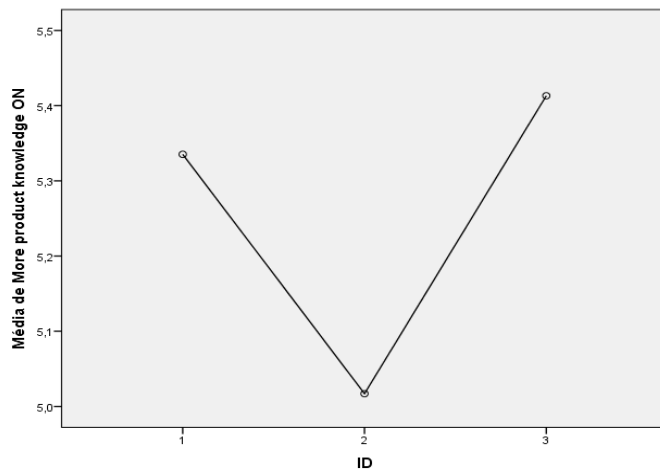
In the “Impulsive Buying”, scenarios presented the direction of results as expected : in the control scenario, there was the lower mean (4.52), the online a higher value (4.8) and a much higher value for offline scenario (5.16). the difference was significant only when we compare the offline versus control ($p=0.001$), and a somewhat significant difference between online versus offline ($p=0.051$). As expected, there was no significant difference between online and control in this variable. Figure 6 presents a graphic representation of the contrasts in the three different scenarios.

Figure 6 Contrasts on dependent variable Impulsive Buying



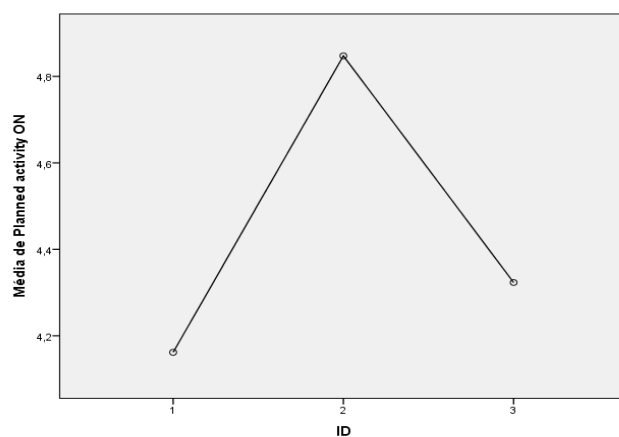
In the “More Product Knowledge” variable we found the results as expected, with the offline scenario (mean 5.02) resulting in lower mean than online browsing (5.34) and control (5.41). The small difference between control and online browsing was expected, as the control scenario (reading the news) has a strong online component in the explained behavior. Figure 7 presents a graphic representation of the contrasts in the three different scenarios.

Figure 7 Contrasts on dependent variable More Product Knowledge



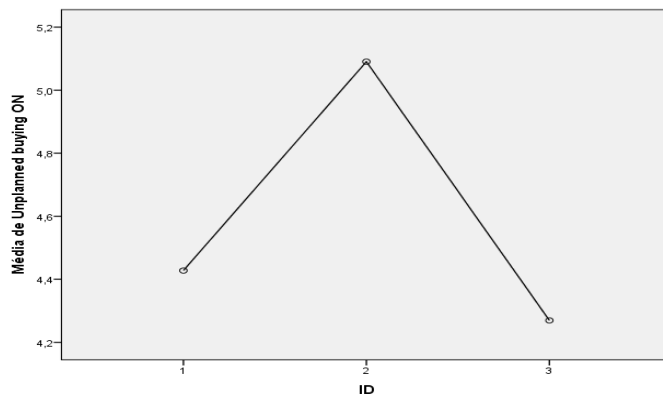
As it was showcased in the interviews, the “Planned Activity” variable performed accordingly to what was expected: it was significantly higher in the offline context (4.85) than in the online (4.16) and control (4.32) scenarios. The P values that denote the difference from offline and control (0.003) and online ($p < 0.0001$) showcase that the offline browsing is indeed a planned activity, where online browsing occurs more spontaneously. Figure 8 presents a graphic representation of the contrasts in the three different scenarios.

Figure 8 Contrasts on dependent variable Planned Activity



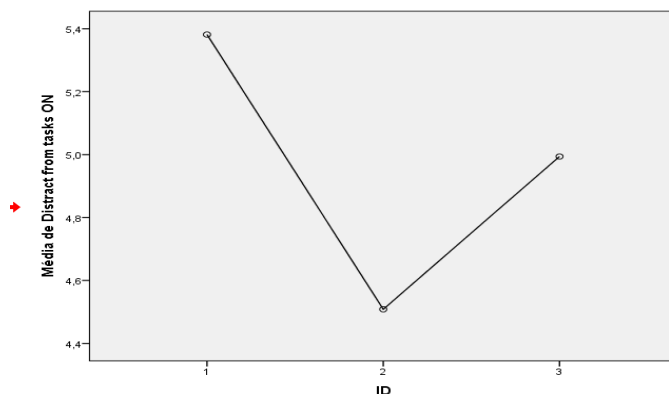
In a variable that is similar to impulsive buying, however, we found more robust result. In “Unplanned Buying”, the differences amongst online and offline scenarios were robust (online 4.43 vs offline 5.09) and significant ($p < 0.001$). The difference amongst offline and control were even higher, where in the control scenario the mean was 4.27, and the significant difference was statistically significant ($p < 0.0001$). Figure 9 presents a graphic representation of the contrasts in the three different scenarios.

Figure 9 Contrasts on dependent variable Unplanned Buying



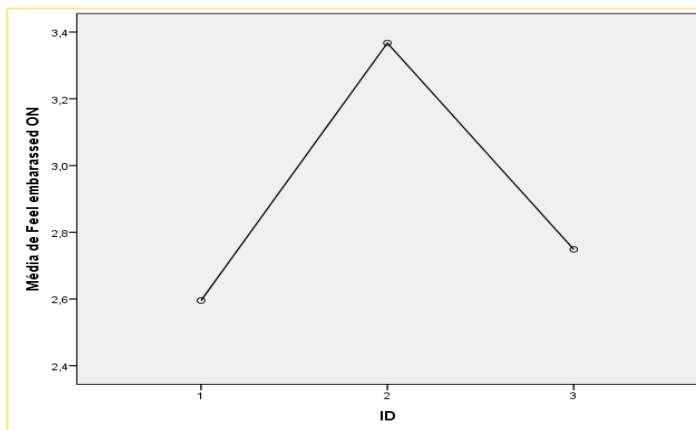
The variable “Distraction From Tasks” performed as expected, showcasing that COB is more associated with task distractions than offline browsing and reading the news. COB presented a mean (5.38) that is significantly higher ($p < 0.0001$) than the offline context (4.51), and also significantly higher than the control scenario - reading the news - ($p = 0.012$). As offline browsing is a planned activity - as noted above - the distraction from tasks in the control scenario was also significantly higher than in the offline context ($p = 0.0023$). Figure 10 presents a graphic representation of the contrasts in the three different scenarios.

Figure 10 Contrasts on dependent variable Distraction from Tasks



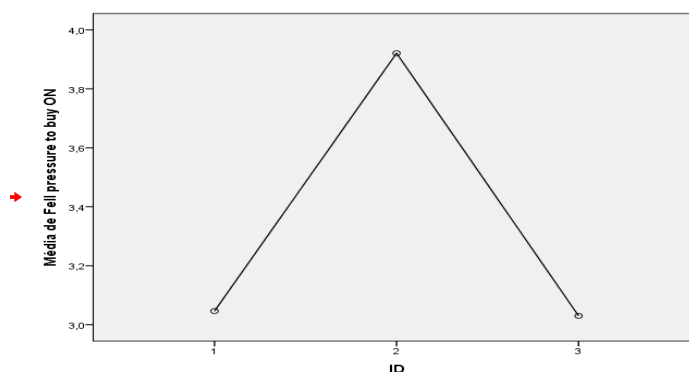
The variable “Feel Embarrassed” also performed as expected. It was significantly higher ($p < 0.0001$) in the offline (3.37) versus online (2.60) context, and also significantly higher (0.001) in the offline versus control scenario (2.75). All three contexts, however, presented means that were lower than 3.5 (what places them in the disagreement side). Figure 11 presents a graphic representation of the contrasts in the three different scenarios.

Figure 11 Contrasts on dependent variable Feel Embarrassed



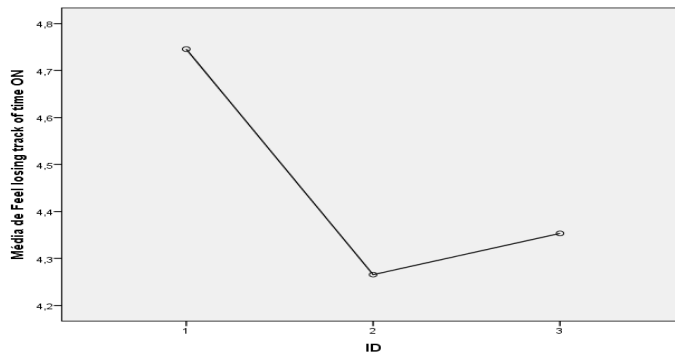
The variable “Pressure to Buy” performed as expected, showcasing that pressure to buy is present in the offline scenario (3.92) is statistically significant higher than online browsing (3.05) and control (3.03). Figure 12 presents a graphic representation of the contrasts in the three different scenarios.

Figure 12 Contrasts on dependent variable Pressure to Buy



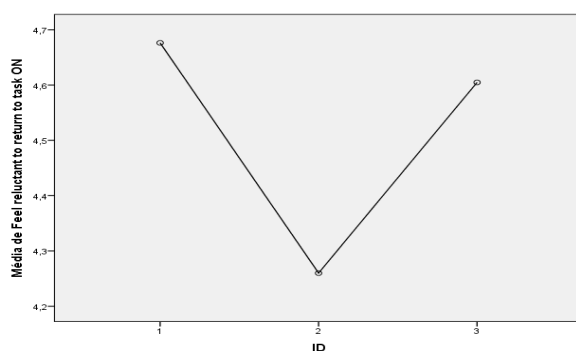
The variable “Feel Losing Track of Time” performed in the same way as variable “Lose Track of Time” expected, showcasing that pressure to buy is present in the online scenario (4.75) is statistically significant ($p=0.012$) higher than online browsing (4.27) and control (4.35). Figure 13 presents a graphic representation of the contrasts in the three different scenarios.

Figure 13 Contrasts on dependent variable Feel losing track of time



The variable “Feel Reluctant to Return to Task” presented the marginal mean for offline scenario (4.26) as statistically significant ($p=0.043$) lower than online scenario (4.68) and control (4.60), suggesting that when browsing offline consumers do not feel reluctant to return to task as it is a planned activity. Figure 14 presents a graphic representation of the contrasts in the three different scenarios.

Figure 14 Contrasts on dependent variable Feel Reluctant to Return to Task



6.8. Covariance - Analysis

First, I checked the reliability of the scales. I used the dimensions in each scale to group the items, so the Need for Touch scale was divided into its two main dimensions: Autotelic and Instrumental. I checked on the original article to list the item with its dimension.

Table 23 displays the Cronbach alpha for each scale/dimension used in this study. With the exception of the Convenience dimension in the Internet Shopping Scale (that had a Cronbach alpha of 0.3), all other scales presented very good values for reliance.

Table 25 Reliability of scales used in the study (Cronbach Alpha)

Scale	Alpha	Items
Obs-Comp Ridgway	0.742	3
Impulsiveness Ridgway	0.812	3
CSSC	0.874	10
Dimension Centrality Materialism	0.724	7
Importance of Convenience Internet Shopper	0.384	3
Attitude toward shopping Internet Shopper	0.826	3
NFT Autotelic	0.914	6
NFT Instrumental	0.874	6

For the 9 variables that did not differ significantly amongst the scenarios, I checked for possible covariates that might be significant. In order to perform this analysis, I checked for covariates for each of the 9 variables, and selected those with the biggest ETA partial square, and then run the covariate analysis again with only these covariates. None of the covariates used in the study proved to be significant in any of these variables. Also the ETA partial square was very low ($p=0.01$). The table below presents the list with all the covariates x variables I checked

7. Discussion

In this paper, an extensive discussion about online browsing was conducted in an attempt of conceptually define Consumer Online Browsing as a distinct behavior. The definition proposed for COB is that it is a dynamic and iterative online act of looking around on commercial website(s), with a purpose of simply exploring products and services for fun, to distract or entertain oneself, whereby purchase intention is present. Figure 2 was idealized as a

circle to represent both the dynamic aspect of COB that incorporates an iterative exchange of information (capturing and processing information) consumers have with the online context and the changes in consumers interest and intentions on consuming products during this exchange of information.

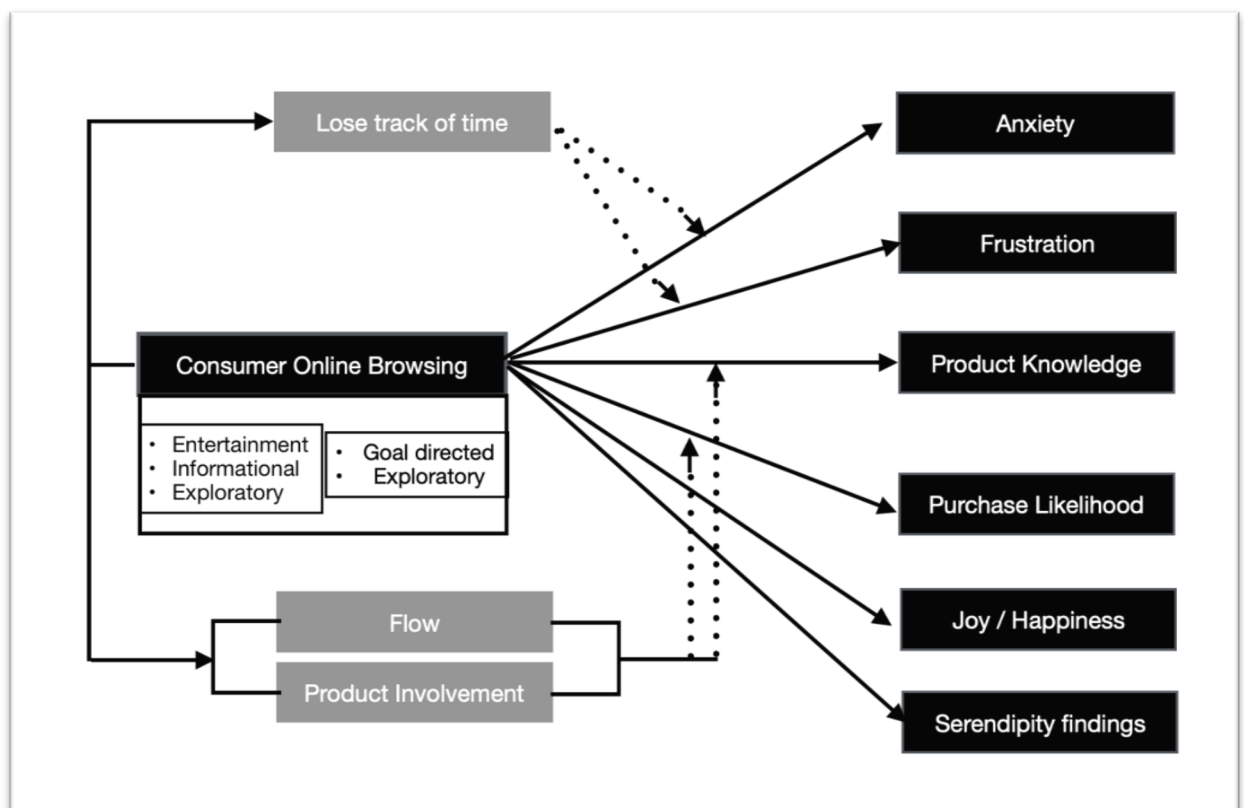
As it was observed during the exploratory interviews conducted in this paper, inside the circle of COB consumers may want to dig deeper into the information about products they are browsing, engaging in a more focused search for a few specific products that capture their attention and for which their purchase intention may increase to a level where they leave the circle of COB and start engaging in Prepurchase type of search, where the objective is to find the better option to buy. But this purchase intention may not increase. Depending on what they find, they may lose interest, or stumble upon other type of products, that trigger them to perform again a more exploratory kind of search inside COB behavior. Sometimes COB may be used as a way to distract consumers from their unwanted tasks, or daily routine, and for products they have a special interest in, these consumers keep performing a focused type of search, without an increase in their purchase intention, because it may be something they cannot afford to buy, but incentives them to pursue a better life (i.e. when consumers constantly browse for houses or dream vacations, as reported in the interviews).

The empirical studies conducted in this paper offer compelling insights about the extent of COB behavior. They complement previous findings about browsing behavior (Gilly & Wolfenbarger, 2011; Moe, 2003b; Ono et al., 2012) and offers a perspective focus on the motivations and perceptions consumers have when they engage in COB, a different way to approach online browsing behavior that has been discussed using the analysis of clickstreams and captured browsing navigation information in websites (Goel, Hofman, & Sirer, 2012; Kumar & Tomkins, 2010; Y.-H. Park & Fader, 2004; Sismeiro & Bucklin, 2004). The analysis proposed in this article expand the discussion about how browsing online may or may not predict consumer behavior online to a broader perspective where COB may relate to emotions consumers have when browsing like hope, happiness, fun, distraction, and even inspirations to their lives.

Both exploratory and experimental surveys offer effective empirical information about COB for previous research, such as the one presented in Gilly & Wolfinbarger (2011) . From the exploratory interviews, it was possible to define 20 dependent variables that were tested in an experimental survey, and it was possible to find empirical evidence that differentiates COB from offline behavior, showcasing its uniqueness. Results suggest that COB leads to more product knowledge, an enjoyable experience that consumers engage in to avoid unwanted tasks, and often lose track of time, and find difficult to return to the other tasks. Something that can have some characteristics of compulsive behavior. In fact, some of the interviewees reported compulsiveness related testimonials, like feeling anxious when could not engage in COB. And different than offline browsing, COB does not lead consumers to engage in impulsive buying, because consumers do not feel pressure to buy, or feel embarrassed, things that empirical data from this study suggests that happens in offline browsing.

Figure 15 presents a nomological network proposal for COB behavior, where I tried to include all the elements of COB that I captured from analyzing the literature, and from the empirical studies in this paper.

Figure 15 Nomological network proposed for COB



Inside the COB box, there are the three main dimensions: exploratory (Case, 2007; Wilson, 2002), informational (Bloch et al., 1986; Kim & Eastin, 2011) and fun (Gilly & Wolfenbarger, 2011; Rowley, 2001; Wolfenbarger & Gilly, 2001) aspects of browsing, the two types of search that are part of the COB circle presented in Figure 2 the exploratory and goal-directed search (Janiszewski, 1998; Novak et al., 2003). Using the results of the empirical studies of this paper, I included four positive outcomes from COB in the nomological network includes the impact of COB in product knowledge, purchase likelihood, joy/happiness and serendipity findings, and two negative outcomes negative outcomes: frustration and anxiety. As possible mediators of the implications of COB in these outcomes, I included those related to browsing and exploratory search behavior online: Flow (Hoffman & Novak, 2009), product involvement (Park & Moon, 2003a) and losing track of time (S. M. Lee & Chen, 2010).

8. Limitations and Future Research

The empirical data from this study is based on consumers' perception of what they conceive as online browsing behavior. Both exploratory interviews and experimental survey collected data asking participants their perception of their online browsing experience. Their online behavior was not observed nor analyzed, which may have excluded some characteristics of online browsing behavior that was not captured in this paper. Also, it was possible to test only part of the dependent variables that derived from the exploratory interviews, as some concepts are hard to explain and transform into testable data. For example, the fact that online browsing prompts consumers to think about sustainable consumption. It appears on the exploratory interviews, but it is something difficult to transform in testable proposition. Also the concept of serendipity findings. Although it was included as a dependent variable, the concept of serendipity is complex and difficult to be instrumentalized in a survey or experiment.

As future research, there are several suggestions that can be derived from the nomological network proposed: how product involvement affect the implications of COB in product knowledge, purchase likelihood. Also, when and what are the consequences of flow In both positive and negative outcomes for COB? Inside the COB circle, how exploratory and goal-directed types of search are connected in the COB behavior. Is COB different for hedonic and utilitarian types of products? To what extent losing track of time in COB is a negative outcome. The relationship of serendipity findings and COB is also a compelling topic to be addressed in consumer behavior literature.

CHAPTER 4

Article 3 - The Adventures of Consumer Online Browsing, Queen of the Search Behavior

1. Introduction

Consumer online browsing (COB) is a distinct consumer behavior that incorporates different types of search actions related to products or brands that a consumer performs in the online context. Moe (2003a) proposed four different types of search behavior: search/deliberation, knowledge building, hedonic browsing, and direct buying (DB). Of these four types, only the latter is not included in the definition proposed for COB. COB represents a broader approach to consumer search behavior, as it incorporates the dynamics of performing a search in the online context. When consumers engage in online browsing behavior, their purchase intention, and the diffusion of products for which they search, varies from low to high, depending on the dynamics of what they find during browsing, and the interplay between these findings and the consumers' preexisting interest, knowledge, and intentions.

The objective of this part of the dissertation is to explore and discuss the managerial and theoretical implications of COB with the aim of better explaining the relevance of this behavior in the marketing and consumer behavior literatures. The literature review discussed characteristics of COB behavior in order to explore previous findings on behaviors that are similar to, or incorporated into, COB. The impacts of online browsing on consumer behavior are examined via analysis of two constructs: product knowledge and purchase intention. Based on studies reported in Chapter 3, it was verified that when consumers engage in online browsing behavior they are exposed to various information about products and brands, and this information may be transformed into product knowledge, and change their intention to purchase that related product. In addition, these constructs have been used extensively in the literature (e.g., Ganesh et al., 2010; Park & Moon, 2003).

In this chapter, three experiments are performed to verify the impacts of COB on product knowledge and purchase intention, which form the dependent variables across all three studies. The first experiment focuses on the different types of search behavior that make up COB behavior. It compares exploratory and goal-directed types of search behavior within COB in relation to the dependent variables. It also discusses the impact of incidental and intentional motivation in COB on these variables. A 2 x 2 experiment was performed via a US Qualtrics consumer panel with 549 participants. Results show that exploratory search behavior positively impacts product knowledge, while goal-directed search behavior positively impacts purchase intention. Intentional browsing increases the impact on product knowledge of exploratory, but not goal-directed, search behavior. Incidental browsing, on the other hand, positively impacts purchase intention for both types of search behavior.

The second experiment is also a 2 x 2 experiment, where COB is compared with prepurchase behavior (Dames et al. 2019; Engel & Roger, 1978)—a type of search in which the goal is to obtain a better purchase—and also with product involvement (low and high). The study was conducted via Toluna using a Brazilian consumer panel with 978 participants. The effect of COB on product knowledge and purchase intention is found to be higher than in the prepurchase stage across the four scenarios, and involvement is found to be relevant to product knowledge only when consumers are engaged in online browsing behavior. The impact on purchase intention is revealed to be marginal in products with high involvement. The third study compares the impact of hedonic and utilitarian motivation in COB and prepurchase. Using a consumer panel of 657 participants, hedonic motivation is found to positively impact both COB and prepurchase behavior with respect to product knowledge, and COB regarding purchase intention.

Throughout these studies COB is found to have a positive impact on product knowledge and purchase intention, and this impact is reinforced when consumers have high involvement with the product and their motivation is hedonic. The studies' limitations, and suggestions for future research, conclude this part of the dissertation.

2. Literature review

In Chapter 3 of this dissertation I defined COB as browsing for a product or service via a website where purchasing is a possibility, where products or services are explored for fun or to obtain information, with a purchase intention that varies from low to high, and a definition of the product that varies from diffused to well-defined. After proposing this definition, it is important to discuss the impacts of COB on consumer behavior.

As explained in the previous chapter, considering COB as a distinct behavior is expected to help researchers and professionals to assess how online browsing impacts the way consumers perceive brands and products, and how COB changes their knowledge about a product or a brand, their interest in the product, and the online browsing activity per se. Kozinets et al. (2017) explored how desire for a product can be constructed in social networks by analyzing and discussing the way desire for food is influenced by specific types of posts on social media. They demonstrated the complexity of consumption motivations in the online context, and of capturing the impacts of online behaviors, such as browsing, on consumers. Thus, the objective of this chapter is to discuss the implications of COB on consumer behavior.

2.1. Ongoing search x goal-directed type of search on information search

Ozkara, Ozmen, and Kim (2017) discussed the differences of ongoing and goal-directed types of search on information search; their study offers a compelling parallel for analysis of the implications of COB for consumer behavior. Ozkara et al.'s focus was on the way individuals conduct online searches; they investigated the different impacts of these two types of search (goal-directed and ongoing) behavior on information search. Their study is relevant because they classified ongoing search as a search that happens constantly, mostly due to involvement an individual has with a specific topic or product; this is very similar to the conceptualization of ongoing search (Bloch, Sherrell, & Ridgway, 1986) discussed in the previous chapter. Ozkara et al. (2017) stated that the impact of the type of search on satisfaction with online information is mediated by the concept of flow—a concept I explore in the following section. The authors found that when consumers experience flow in their online search, and their search is ongoing, they enjoy their experience more, are more likely to lose control of time keeping, and enjoy enhanced curiosity, when compared to performing a goal-

directed search. These dimensions are related to the perception of the information search experienced by individuals and are positively connected to hedonic urges. On the other hand, goal-directed search behavior is positively connected to utilitarian urges, and negatively impacted by curiosity (i.e., curiosity leads individuals to evaluate the information search experience negatively).

Ozkara et al. (2017) suggested that consumer search behavior can be either goal-directed or exploratory. This type of classification was first suggested in early literature on the online context, and also on other areas of research, such as information search and computer science (Dames, Hirschfeld, Sackmann, Thielsch, 2019; Janiszewski, 1998; Novak et al., 2003; Sanchez-Franco & Roldan, 2012); however, as explained in the previous chapter, COB is a more complex concept, where consumers may engage in goal-directed and exploratory browsing iteratively, depending on what they find, their motivations, and their resources (e.g., time). This is why COB is represented by a circle in Figure 3, where the purchase intention varies from low to high and the product definition varies from highly diffused to well-defined. This approach shows that COB incorporates different types of search that dynamically change from exploratory to goal-directed, instead of being one or the other. Of the four different search behaviors identified by Moe (2003b), only DB is not part of the concept of COB, as when consumers perform a DB search they have high product definition and high purchase intention. I will now discuss two concepts that are relevant for the implications of COB in consumer behavior: flow and serendipitous findings.

2.2. Flow in the online environment, and its impact on consumer behavior

Flow is a state of mind that entails total immersion in an activity, with high involvement and a positive perception of the activity (Csikszentmihalyi, 2009). Flow comprises six main characteristics: intense and focused attention, merging of action and awareness, loss of awareness of oneself as a social actor, a sense of control (dealing with the situation), distortion of time perception (usually feels that time has passed more quickly), and perception of reward from undertaking the activity (Nakamura & Csikszentmihalyi, 2005). It is an intrinsic cognitive experience that occurs when the skill an individual has to perform an activity is balanced with the challenge this activity presents (Csikszentmihalyi, 2009). Hoffman and Novak (1996) suggested stimulating flow in computer-mediated activities, as they proposed that when

consumers experience flow in the online environment positive outcomes may occur, such as consumer learning, exploratory behavior, and positive perception of the experience. Since then, several other authors have explored flow in consumer behavior, in areas such as online customer experience (Novak, Hoffman, & Yung, 2000b; Rose et al., 2012; Rose, Hair, & Clark, 2011), website navigation (Kim & Eastin, 2011; Luna, Peracchio, & De Juan, 2002), impulsive buying (Huang, 2016; Wu, Chen, & Chiu, 2016), and gaming (Procci, Singer, Levy, & Bowers, 2012).

From this previous research it can be said that when consumers are in flow they adopt a more exploratory behavior (Novak et al., 2003), lose track of time (Novak et al., 2000b, 2003), buy unplanned things (Wu et al., 2016), and learn more about products and brands (Hoffman & Novak, 1996; Luna et al., 2002). These outcomes are all relevant for consumer behavior and are also related to the outcomes of COB. Researchers have proposed several ways to measure and assess flow (Novak et al., 2000b; Payne, Jackson, Noh, & Stine-Morrow, 2011; Procci et al., 2012). For example, a model proposed by Payne et al. (2011) focuses on flow while performing an activity. The model uses 26 statements separated into nine different dimensions. Although this scale seems extensive, it is actually one of the more compact, with a clear distinction of dimensions; thus, it is selected for use in the studies discussed in following sections of this dissertation. The dimensions merging actions and awareness (MAA), autotelic experience (AE), and transformation of time (TT) are considered to be most closely connected to COB. In MAA, clicks on hyperlinks during online browsing may lead consumers to merge of actions and awareness; AE relates to the entertainment aspect of COB; and TT to the distortion of time perception. In relation to the results from the survey discussed in the previous chapter, MAA can be said to relate to ease of finding things online and variety of products offered, AE to enjoyment from browsing and reluctance to return to work, and TT to losing track of time. In the information search literature, five dimensions of flow have been discussed as subjective positive perceptions of the search experience: enjoyment, time distortion, curiosity, perceived control, and concentration. These five dimensions relate to the characteristics of COB discussed in the previous chapter, as follows: enjoyment is connected to the fun of shopping, or the entertainment aspect of COB; time distortion pertains to losing track of time; curiosity relates to exploratory behavior in COB; perceived control is a positive characteristic that consumers perceive in their online browsing experience when compared to the offline context; and concentration is connected to the informational aspect of COB.

Although the effects of flow have been suggested to influence consumer behavior in browsing (e.g. Kim & Kim, 2008), shopping (e.g. Koufaris, 2002), and learning about products (e.g. Novak et al., 2003), it is critical to highlight that flow is necessarily part of COB behavior, as consumers may not get into the flow state while browsing. Sometimes they engage in online browsing as a distraction (e.g., search/deliberation type of navigation identified by Moe [2003]), without focusing too much attention, and just continue browsing until it is no longer fun. Such lack of focus may prevent consumers from engaging in flow. COB is a broader concept that involves browsing behavior that is exclusively exploratory, moving through browsing stages where consumers collect information due to their personal involvement with a product; for fun; or for the thrill of finding bargains. This iterative process may or may not move progressively to the stage where consumers define the product, they end up buying. This broader approach is part of the definition proposed for COB, and the positive implications of flow in consumer behavior cannot be said to be similar to the implications of COB in consumer behavior. This chapter discusses the implications of this.

2.3. Serendipitous findings in browsing

Serendipity has been extensively discussed in information search literature, as part of browsing behavior that varies from exploratory to goal-directed search (Case, 2007). Serendipity has been studied as occasional discoveries, part of the scanning process in search behavior. Recently, the term has been conceptualized as an “incident-based, unexpected discovery of information leading to an aha! moment when a naturally alert actor is in a passive, non-purposive state or in an active, purposive state, followed by a period of incubation leading to insight and value” (Agarwal, 2015).

The exploratory aspect of COB may lead to serendipitous findings. While navigating online, consumers often encounter products and brands they were not aware of previously. Due to the characteristics of the online environment, where product and brand offerings are unlimited (Rose et al., 2012), serendipitous findings can be expected when consumers engage in online browsing behavior. In the information search literature, serendipity has been conceptualized using 10 different dimensions (Björneborn, 2008); however, these dimensions directly relate to the physical environment. McCay-Peet and Toms (2011) analyzed the fit of these dimensions to the digital environment, and narrowed them down to five: enabled connections (the manner in which connections between topics are facilitated), introducing the

unexpected (stumbling upon unexpected products or brands), presented variety (range of products and brands in the online context), triggered divergence (something in the product or brand that triggers divergence in the way consumers think), and induced curiosity (the presence of curiosity triggers that lead to exploratory behavior).

The curiosity that is triggered before or during COB behavior can be said to be part of these five dimensions. The dimensions are present in COB behavior as follows: the variety of products and brands offered online (presented variety) and the possibility of navigating through these options (enabled connections) may lead consumers to occasionally or accidentally (a main characteristic of serendipity [Case, 2007]) stumble upon unknown products or brands (introducing the unexpected), which triggers a new way of thinking or perceiving (triggered divergence), in turn igniting consumers' curiosity to explore and learn more about this product or brand (induced curiosity). Curiosity may also be induced via consumers' preexisting interest (Case, 2007) in the product or brand stumbled upon.

As discussed in the previous chapter, although serendipitous findings were highlighted during the exploratory interviews as a key difference between COB and offline browsing, in the survey such differences were only marginally significant ($p=0.091$). As also discussed in previous chapters, serendipitous findings are also likely to occur in offline browsing, although in this context the “variety” and “enabled connections” dimensions are not always present (e.g., in small cities, the range of products and brands offered offline is limited, as reported by the interviewees). Thus, serendipitous findings can be said to be likely to arise from the exploratory behavior consumers engage in during either online or offline browsing.

2.4. Impacts of COB on consumer behavior

As discussed in the previous chapter, COB is a behavior that embodies various types of search activities with differing levels of purchase intention. It is also expected that COB impacts consumer behavior. In this dissertation, I focus on two constructs to analyze this impact: product knowledge and purchase intention.

Product knowledge pertains to the informational aspect of COB. Through browsing, consumers access and retain information about products and brands; though this can happen either online or offline, it is significantly higher ($p=0.014$) in the online context (as discussed

regarding the results of the survey in Chapter 2). Acquiring knowledge about products and brands is a positive outcome for consumers (Brucks, 1985; Lynch & Ariely, 2000; Peterson & Merino, 2003), and therefore represents a relevant impact on consumer behavior. Product knowledge has been extensively discussed in the literature (Brucks, 1985; Lee & Lee, 2011; Moorman, 1995; Park & Moon, 2003; Pires, Stanton, & Rita, 2006; Selnes & Grønhaug, 1986), and empirical evidence has shown the impact of product knowledge on several areas, such as memory (Alba, 1983), ad evaluation (B. K. Lee & Lee, 2011), perception of brand extension (Smith & Park, 1992), and product evaluation (Roy & Cornwell, 2004).

Product knowledge influences all stages of the consumer decision process (Bettman & Park, 1980; Park & Moon, 2003; Selnes & Grønhaug, 1986). It can be defined as information about a product that consumers store in their memory and access during the buying process (Bettman & Park, 1980; Park & Moon, 2003). Product knowledge can be assessed through either objective measurements, measured externally, with specific questions about the product; or subjective measurements, where consumers own perceptions of a product are assessed. In this dissertation, the latter approach is used, as the objective is to discuss how online browsing affects consumers' perceptions of acquiring product knowledge, regardless of the type of product browsed for. To assess objective product knowledge measures, it would be necessary to create specific product-related questions, which is not intended in the analysis and discussion proposed in this paper. When consumers experience COB they access various information about products and brands, and this information positively affects their perception of product knowledge; therefore, as a main effect on product knowledge, I suggest the first hypothesis of this study:

H1: COB positively impacts subjective product knowledge.

The concept of purchase intention has been extensively used in the consumer behavior literature (Brown, Pope, & Voges, 2003; Korzaan, 2003; Liu, Chu, Huang, & Chen, 2016) to predict buying behavior. Although some have argued that there are differences between purchase intention and actual buying behavior (De Cannière, De Pelsmacker, & Geuens, 2009; Foxall, 2005), purchase intention is frequently used (Giovannini, Xu, & Thomas, 2015; Rose et al., 2012; Xu, Chen, Burman, & Zhao, 2014) because it can be assessed in experiments, where the subjective perception of purchase intention is indicated by respondents. In this dissertation, where the main topic relates to browsing behavior and how COB impacts intention

to purchase a product, it is plausible to assume that purchase intention is a valid dependent variable that can be used to assess the impact of COB on consumer behavior.

As discussed in Chapter 2, when consumers engage in browsing, they have some degree of purchase intention that motivates this browsing behavior. During COB, consumers visit, learn about, and are exposed to several products and brands. It is expected that purchase intention increases when consumers browse for more information about specific products, and when the purchase intention is high and consumers focus on a specific product, they exit online browsing behavior. Therefore:

H2: COB positively impacts purchase intention.

2.5. Different types of search in COB behavior

Exploratory and goal-directed search behavior have been extensively discussed in consumer behavior literature (e.g., Dames et al., 2019; Janiszewski, 1998; Moe, 2003b; Rowley, 2001; Sanchez-Franco & Roldan, 2012), typically with the aim of exploring and discussing the differences between these two types of search behavior. The gap in this discussion, which I am to fill via my consideration of COB, pertains to the connection between these two distinct types of behavior that, as discussed in the previous chapter, may involve an iterative exchange. This can be illustrated in the following scenario: a consumer starts browsing because they are looking for something they would like to buy, in an exploratory way. They look through different websites and product categories. Something triggers their interest in a specific product, so they start browsing about this category, looking for specific items and getting more information, which is more like goal-directed behavior. A different product then catches their attention, and they start to again look at various types of products, including the category they were first interested in. They realize they have spent more time than they intended to, so they stop the browsing activity. The next day, they start to conduct an exploratory search again, but this time with a more focused product definition, and higher purchase intention. Then, when they find another product they are interested in, they start a goal-directed search again, though this time with high enough purchase intention to lead them to compare available options and purchase the product.

Only in this last stage is the consumer no longer browsing anymore—that is, when they are performing a DB (Moe, 2003) search with the objective of making a purchase. This concept is similar to the classic prepurchase behavior (Engel & Roger, 1978), where the goal of the search is driven by the need to make the best purchase decision possible. It is here that the line can be drawn to separate COB from prepurchase or DB behavior. All other exploratory and goal-directed types of search mentioned in this illustrative scenario are part of the concept proposed for COB. In Chapter 3, it was seen that the presence of impulsive buying ($p < 0.0001$), unplanned buying ($p < 0.0001$), and the feeling of pressure to buy ($p < 0.0001$) significantly differed between COB and offline browsing behavior. Thus, it seems that consumers are likely to engage in online browsing in their own time, whenever they feel the need. This was also reported by interviewees in the exploratory study, who mentioned they feel in control during COB, as they can gather as much information about products or brands as they want, are able to include and exclude products from their shopping cart, and can stop and return to COB behavior whenever they want to. This is why COB embraces both exploratory and goal-directed types of search. When consumers perform a more exploratory type of search during online browsing, scanning and analyzing available options, and product definition is diffused (see bottom part of the COB circle in Figure 3), they are more likely acquire product knowledge. Therefore:

H3: Consumers engaged in exploratory (versus goal-directed) search during COB have higher impact on product knowledge

On the other hand, when consumers are performing a more goal-directed type of search during online browsing, where their browsing behavior is focused on a few products (product definition is less diffused; see top area of the COB circle in Figure 3), their purchase intention is higher. Therefore:

H3a: Consumers engaged in goal-directed (versus exploratory) search during COB have higher purchase intention.

In COB behavior, an exploratory-type search may happen either incidentally or intentionally (Dames et al. 2019; Moe, 2003b). Such intentional search is motivated by product involvement, as explained in relation to the concept of ongoing search (Bloch et al., 1986), while incidental search may be triggered by electronic advertisements seen via email, websites (Johnson, Moe, Fader, Bellman, & Lohse, 2004; Yao & Mela, 2011), or posts on social media (Touchette et al., 2015; Turel & Osatuyi, 2017). During incidental COB it is expected that consumers stumble upon unknown products or brands, as they are browsing the website in an unplanned way—one of the characteristics that can lead to serendipitous findings. Therefore, during intentional COB, where COB is initiated due to product involvement, it is expected that the impact on product knowledge is higher (in comparison with incidental COB), as consumers have a preexisting interest that motivates their COB behavior. Therefore:

H4: When consumers engage in intentional COB (versus incidental COB) behavior, the impact on product knowledge is higher.

In addition, when consumers engage in COB intentionally, it is expected that their purchase intention is higher. Therefore:

H4a: When consumers engage in intentional COB (versus incidental COB) behavior, the impact on purchase intention is higher.

2.6. Product involvement in COB behavior

Product involvement refers to the ongoing interest a consumer has in a product category that makes them constantly look for information, and browse through products either offline (Bloch et al., 1986) or online (Ozkara et al., 2016). As discussed in Chapter 2, product involvement drives consumers to browse repeatedly for products, with the aim of simply obtaining information and with purchase intention that varies from low to high. The acquisition, processing, and distribution of information about products they are involved with is important to consumers (Bloch & Richins, 1983; Bloch et al., 1986; Laing & Royle, 2013). Product involvement is based on consumers' needs, values, and interests (McQuarrie & Munson, 1992; Zaichkowsky, 1985), and consumers tend to get more excited during the buying process when they are involved with the product (Bloch et al., 1986; Jayawardhena & Wright, 2009). Product involvement may occur due to three main reasons (Jayawardhena & Wright, 2009; McQuarrie

& Munson, 1992; Judith Lynne Zaichkowsky, 1985): personal (internal interests, needs), physical (characteristics of the product that attract consumers' attention), and/or situational (specific and temporary need); consumers may be driven by one or more of these reasons during the journey through their COB experience.

During the browsing stage, when consumers experience online browsing behavior, it is expected that when browsing for products or brands that they are more involved with, the impact of COB on product knowledge and purchase intention is increased. Therefore:

H5: The impact of COB on product knowledge is higher when consumers have high involvement with the product (versus low involvement).

H5a: The impact of COB on purchase intention is higher when consumers have high involvement with the product (versus low involvement).

In COB type of search, purchase intention is lower as consumers are exploring, search through different types of products, (more diffused search for products, accessing several types of products). Therefore, it is expected that the purchase intention for COB is lower than in PP type of search, where the product is more clearly defined (less diffused, consumers are not looking through several types of products), purchase intention is high. However, when involvement with products is high, purchase intention in COB is higher than in PP, as consumers access information about several products they have a high involvement with.

2.7. The hedonic influence of COB on consumer behavior

As discussed in Chapter 2, the entertainment aspect of COB is relevant because it is related to the fun of shopping (Ganesh et al., 2010; Gilly & Wolfenbarger, 2011), and the thrill of finding good deals (Bardhi & Arnould, 2005; Schindler, 1989). The hedonic aspect of shopping has been extensively discussed in consumer behavior literature, especially since the seminal paper by Holbrook and Hirschman (1982), who stated that consumption is a way for consumers to pursue their fantasies and have fun. The hedonic/utilitarian counterpoint has also been used in diverse areas of marketing literature, ranging from the use of figurative texts in the analysis of consumer reviews for hedonic products (Kronrod & Danziger, 2013) to the

assertiveness of communication in products related to hedonic consumption (Kronrod, Grinstein, & Wathieu, 2012).

Novak et al. (2003) studied the differences in exploratory and goal-directed information search and suggested that exploratory search is more connected to hedonic motivations, while in goal-directed search utilitarian motivations are more dominant, as consumers aim to find the best alternative, and thereby reduce the risk inherent in buying. As discussed in the previous chapter, the entertainment aspect of browsing is present throughout the COB experience, as consumers that engage in COB are exploring either due curiosity, to become better informed about a product they are involved with, or to find good deals. Thus, COB can be considered as essentially a hedonic activity. When consumers exit COB they are either ready to compare available options and make the best purchase—this is the main goal of prepurchase search (Engel & Roger, 1978) and DB search (Moe, 2003a), which is a goal-directed search activity where the utilitarian motivation is more prominent (Dames et al, 2019; Novak et al., 2003). Therefore:

H6: When consumers engage in COB for hedonic reasons (versus utilitarian), the impact on product knowledge is higher.

H6a: When consumers engage in COB for hedonic reasons (versus utilitarian), the impact on purchase intention is higher.

2.8. Summary of proposed hypotheses

To empirically test the hypotheses proposed in the previous section, three experiments are conducted. The dependent variables for the three experiments are product knowledge and purchase intention. The objective of experiment 1 is to verify the different impacts of exploratory and goal-directed types of search during the COB experience on the dependent variables. Experiment 1 also investigates the different impacts of incidental and intentional motivations for COB. In experiment 1, the analysis focuses only on the COB experience, and aims to verify H3, H3a, H4, and H4a.

The other two experiments compare COB with prepurchase behavior, where purchase intention is high and the product for purchase is well-defined. Experiment 2 aims to verify the impact of product involvement on the impact of COB on the dependent variables, testing H1, H1a, H2, H2a, H5, and H5a. Experiment 3 aims to verify the impact of hedonic motivation on the impact of COB on dependent variables, testing H1, H1a, H2, H2a, H6, and H6a. Table 24 presents a summary of hypotheses to be tested.

Table 26 Summary of hypotheses and information of study prepared to test

Hypothesis	Study
H1: COB impacts positively on subjective product knowledge	2 and 3
H2: COB impacts positively on purchase intention	2 and 3
H3: Consumers engaged in exploratory (versus goal-directed) search during COB have higher impact on product knowledge	1
H4: When consumers engage in intentional COB (versus incidental COB) behavior, the impact on product knowledge is higher.	1
H4a: When consumers engage in intentional COB (versus incidental COB) behavior, the impact in purchase intention is higher.	1
H5: The impact of COB on product knowledge is higher when consumers present a high-involvement with the product (versus low-involvement).	2
H5a: The impact of COB on purchase intention is higher when consumers present a high-involvement with the product (versus low-involvement).	2
H6: When consumers engage in COB for hedonic reason (versus utilitarian), the impact on product knowledge is higher.	3
H6a: When consumers engage in COB for hedonic reason (versus utilitarian), the impact on purchase intention is higher.	3

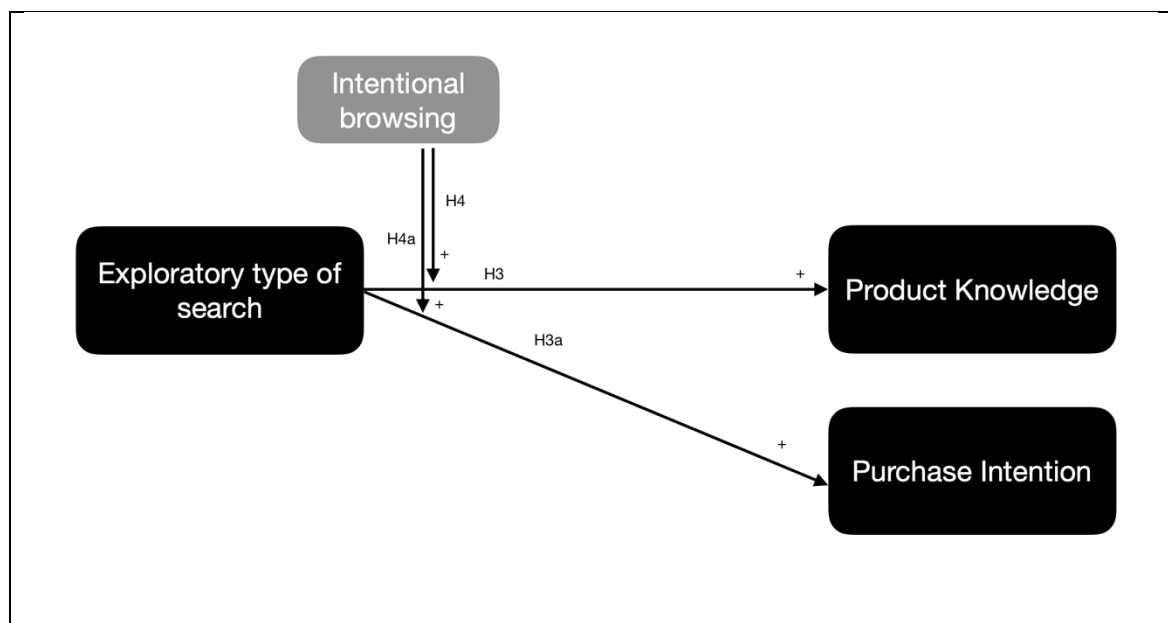
3. Experiment 1: Exploratory versus goal-directed types of search in COB

3.1. Overview of the experiment

For all three experiments in this article, a “As Predicted” document was created. This type of document register detailed information of the design of the experiments and expected results. Appendix 2 lists all information registered on “As Predicted” and it is also available online, on demand.

This experiment aims to verify how the impact of COB on consumer behavior variables occur inside COB behavior. As it was conceptualized in chapter 3, COB incorporates different types of search (e.g. three of the four types of search proposed by Moe, 2003a), and in these searches both purchase intention and product definition vary during COB behavior. At times, consumers are performing a more exploratory type of search, scanning several products, and when they are interested in gathering more information about a specific product, they perform a more focused type of search. The objective of this study is to verify how these different types of search impact on consumer behavior during COB experience. COB may be either intentional (when consumers engage in COB voluntarily) or incidental (when they are prompted to click on any link and then unintentionally engages in browsing), and these different motivation for browsing may interact with the impact of type of search. As it is illustrated in figure 16 below, this study specifically aims to verify hypotheses 3, 3a, 4, and 4a.

Figure 16 Hypothesis testes in study 1



To test these hypotheses, an experiment with a 2 (high/low intention) x 2 (incidental/intentional motivation) design is proposed. The main dependent variables are product knowledge and purchase intention (as they are part of the hypotheses tested), however 9 additional emotional responses to browsing activity, selected from the dependent variables studies in chapter 3, are also tested. 5 of them with positive valence: Happiness, Hope, Joy, Optimism, and Excitement, and 4 of them with negative valence: Irritation, Frustration, Sadness, and Boredom. As it is expected that product interest changes during COB experience,

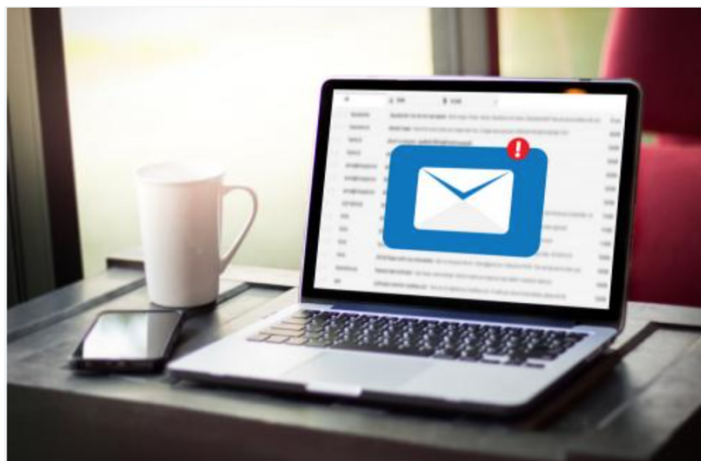
one dependent variable was included to assess this item. Also, as it was discussed in chapter 3, serendipity finding is a positive outcome from COB, so it was also included as a possible dependent variable in the study.

Thirteen possible covariates were included in design of the experiment, demographics: age, gender, income, and ethnicity, personality traits: compulsiveness, impulsiveness, discussed in chapter 2, related to the product category used in the experiment: informed product interest, product involvement, and related to the browsing activity: browsing time, informed fun in the activity, enjoyment of the activity, interest in the activity performed, and serendipity findings perception.

3.2. Method and Procedures

The manipulation used in this study was very subtle, aiming to mimic consumers real behavior in online browsing. Participants were instructed to imagine they were performing an online browsing activity, as they would in real life situation. The experiment starts with this instruction: *“Imagine that you are on your computer, having done some work and checking your email”*. This instruction was followed by figure 18, to aid in the manipulation.

Figure 17 Image used to aid in manipulation - study 1



Source: Google

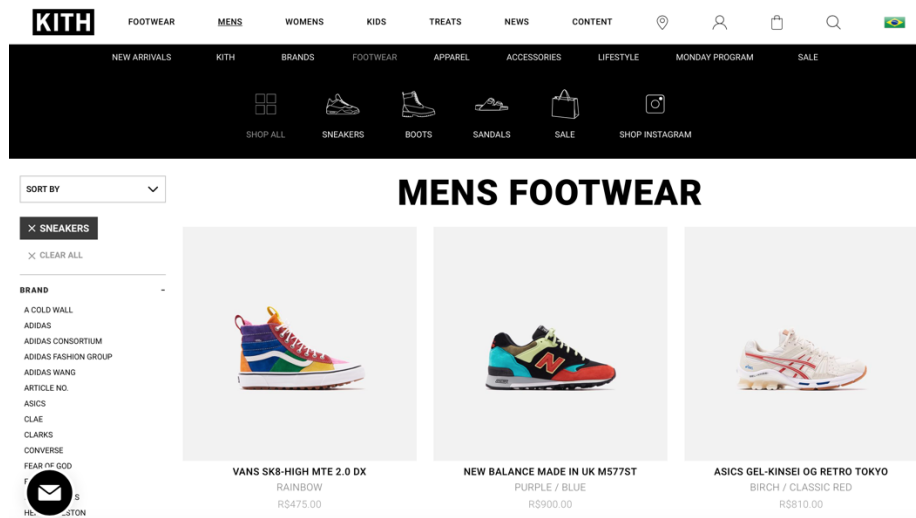
Then, respondents were randomly allocated in one of the four possible scenarios, where manipulation was in the instructions that anticipated requested browsing activity, described in Table 25. Phrases in bold are related to the intention manipulation, while words underlined are related to the motivation manipulation.

Table 27 Description of manipulations used in study 1.

Intention	Motivation	Instructions / Manipulation
Low	Incidental	Next, you <u>open an email and see a promotion</u> from a brand of sneakers that you find interesting, so you proceed to the website just to browse around without a sizable intention to purchase anything, simply to take a look.
Low	Intentional	Next, you <u>open another browser window where you have bookmarked</u> a brand of sneakers that you find interesting, so you proceed to the website just to browse around without a sizable intention to purchase anything, simply to take a look.
High	Incidental	Next, you <u>open an email and see a promotion from a brand</u> of sneakers that you have been waiting for , so you proceed to the website with an intention to finally get the sneakers you have wanted.
High	Intentional	Next, you <u>open another browser window where you have bookmarked</u> a brand of sneakers that you have been waiting for , so you proceed to the website with an intention to finally get the sneakers you have wanted.

Then respondents were instructed to click on a link to start their browsing activity, with the following instructions: *“Please click on the link to look around as you imagine yourself in the scenario described above. Spend as much or as little time as you need on the website before proceeding to answer several related questions.”*. For all the four conditions, respondents were directed to the same webpage, looking for the same product: sneakers. Sneakers were chosen because of the results of a pretest of preferred type of products in consumer goods that was conducted in experiment 2 and it is discussed in the section dedicated to experiment 2. The website chosen for the study was www.kith.com because of its vast collection of sneakers and easiness to browse in different categories of sneakers. The link used in the study was directed to sneakers’ collection separated by gender (men and women, one specific for each gender) and respondent could choose which gender they would like to browse, as both links were presented to each respondent, regardless of informed gender in demographics questions. Figure 18 presents the landing page of the website chosen for the experiment.

Figure 18 Men's Sneaker landing page from Kith.com, used in study 1



Source: www.kith.com

3.3.Measures

Dependent variable Product Knowledge was measured using subjective product knowledge scale (Park & Moon, 2003) as it addresses directly the subjective product knowledge perception consumers have. Purchase intention was measured with a direct question: “How likely are you to buy a sneaker that you selected during your search on the sneaker website?” with a 7-points Likert scale. All 9 emotional responses to browsing were measured with a direct question: “As you spent some time on the website that sells sneakers, to what extent did you experience the following.” Then the nine emotions listed as dependent variables appeared in a table with a 7-points Likert scale.

Change in product interest was measured using a direct question: “After spending some time earlier on the website that sells sneakers, how do you feel your interest for sneakers has changed?”, followed by a 7-points scale with a -3 to 3 points range, where -3 was mentioned as “interest decreased significantly” and 3 “interest increased significantly”. 0 was marked as “no change in my interest”. Serendipity findings as a dependent variable was measured with direct question: “After spending some time earlier on the website that sells sneakers, did you come across brands and/or different sneaker styles you did not know before?”.

Covariates obsessive and compulsive and impulsiveness were measured using these two dimensions of Ridgway et al., (2008b) proposed scale for compulsiveness assessment. Serendipity was also measured with a serendipity scale adapted for online environments (McCay-Peet & Toms, 2011). Interest in the activity was measured using 4 items scale (M. Moorman, Neijens, & Smit, 2002), product involvement was measuring using 4 items scale from importance dimension of involvement proposed by Bauer, Sauer, & Becker (2006), and enjoyment of the activity was measured using autotelic dimension from Flow scale (Payne et al., 2011). Product interest was assessed as a direct question: “Overall, how interested are you in sneakers as a product category?”.

3.4.Manipulation and Attention Check

To check for manipulation for purchase intention, it was included a direct question: “Finally, as you spent time on the sneaker website, you felt like you were mostly” and two options were presented: “Looking around, without any specific sneaker in mind”(low purchase intention) or “Looking for specific models of sneakers that you may want to buy”(high purchase intention).

Manipulation was also checked with a direct sentence: “to what extent did you experience the following: sense of exploration and discovery” (to check low purchase intention) or “focused on a goal” (high purchase intention).

One attention question was included with two items to be responded. In a similar format of the way the other questions were presented in the questionnaire, the attention check was one of the last questions to be asked, with a 7-points Likert scale. The question was clearly identified as “attention check”: “The questions below are to **check your attention** when responding to this questionnaire. Please select the option defined in the sentences below. If you fail to do so, we will assume that you are not paying attention and will have to discard all of your answers.”and then 2 questions asked them to choose specific responses in the Likert scale: “Please select the disagree option” and “Please select the somewhat agree option”. The objective of this question was to actually filter respondents that were paying attention in the survey. I chose to include 2 questions to also filter respondents that choose the same option in Likert scale type of questions.

3.5.Pretest

Pretest was run on M-Turk with 82 valid responses from M-Turkey. 65.9% of them were male, 73.1% between 21 and 40 years old, 35.4% with annual household income from US\$ 25K to US\$ 50k. Details of demographics of participants are presented in Table 26.

Table 28 Demographic information of pretest participants (n=82)

	LOW INCIDENTAL	LOW INTENTIONAL	HIGH INCIDENTAL	HIGH INTENTIONAL	Total	%
Participants	6	26	26	24	82	
FEMALE	5	7	9	7	28	34,1%
MALE	1	19	17	17	54	65,9%
AGE						
21 - 30	1	13	12	7	33	40,2%
31 - 40	3	7	6	11	27	32,9%
41 - 50		4	4	4	12	14,6%
51 - 60		1	2	1	4	4,9%
61+	2	1	2	1	6	7,3%
INCOME						
LESS THAN US\$ 25K	2	6	3	1	12	14,6%
US\$ 25K < US\$ 50K	1	9	11	8	29	35,4%
US\$ 50K < US\$ 75K	2	5	4	9	20	24,4%
US\$ 75K < US\$ 100k	1	4	6	1	12	14,6%
US\$ 100K < US\$ 150K			2	2	4	4,9%
MORE THAN US\$ 150K		2		3	5	6,1%

A one-way between-groups analysis of variance was conducted to verify if the manipulation check worked for the type of search manipulation. In the “focused on a goal” participants in the high purchase intention (vs low) rated significantly higher ($M=5.56$ vs 4.44 , $p=0.002$).

During pretest it was identified one error in the Qualtrics survey design that was blocking the distribution of scenario LOW INCIDENTAL, and therefore it was not possible to check if manipulation for LOW condition was effective. The error was identified and fixed prior to running the experiment.

3.6. Demographics of Participants

This study was run on Qualtrics consumer panel in February 2020. 830 responses were collected. 21 were incomplete (2.5%), 260 invalids (failed in one or both of attention check answers – 31.3%), and 549 valid responses (66.1%), roughly 2/3 of the total participants. It is a 2x2 experiment, and the ratio of the 1.21 between the cell with most participants (low, incidental n=148) and the cell with the least participants (high, incidental, n=122), which is lower than 1.5, a parameter that could indicate that the violation of homogeneity of variance to be a valid issue in ANOVA analysis (Stevens, 1996), therefore even if one variable violates this assumption, the distribution of participants in the cells is even enough to overcome this violation.

About 2/3 of participants are White (64.8%). Hispanic (16.2%) and Black / African American (10.4%) are about 1/4 of the participants. 50.1% are female, 49.7% male, participants were limited to 18+, and the distribution of participants in each group was even (the first group – ages 18 to 24 presents a lower percentage but this is also a group with lower range of age), and about 51% of respondents have an annual household income less than US\$ 50k. Participants were also grouped into their browsing time during the activity. Those who had a browsing time below average was allocated in the low browsing time group. They represented about 70% of participants. Distribution of low and high browsing time groups was even across the four different scenarios. Table 27 presents detailed information about the demographics of participants.

Table 29 Demographics of participants in experiment 1

Ethnicity	Low / Intentional	Low/Incidental	High / Intentional	High / Incidental	Total	%
Asian	9	8	9	5	31	5,6%
Black / African American	8	20	12	17	57	10,4%
Hispanic	25	17	28	19	89	16,2%
Indian	2				2	0,4%
Other	6		6	2	14	2,6%
White	94	103	80	79	356	64,8%
Total	144	148	135	122	549	100%
Age group						
Between 18 and 24	14	13	21	19	67	12,2%
Between 25 and 34	24	32	26	22	104	18,9%
Between 35 and 44	27	20	19	17	83	15,1%
Between 45 and 54	27	26	22	25	100	18,2%
Between 55 and 64	29	23	27	17	96	17,5%
More than 65	23	34	20	22	99	18,0%
Total	144	148	135	122	549	100%
Income						
Less than U\$ 25k	37	29	28	32	126	23,0%
Between U\$ 25k and U\$ 50k	32	50	43	28	153	27,9%
Between U\$ 50k and U\$ 75k	28	34	24	21	107	19,5%
Between U\$ 75k and U\$ 100k	23	15	14	16	68	12,4%
Between U\$100 and U\$ 150k	16	13	17	14	60	10,9%
More than U\$ 150k	8	7	9	11	35	6,4%
Total	144	148	135	122	549	100%
Gender						
Male	68	77	68	60	273	49,7%
Female	76	70	67	62	275	50,1%
Other		1			1	0,2%
Total	144	148	135	122	549	100%
Browsing time group						
Low (below average)	93	101	95	91	380	69,2%
High (above average)	51	47	40	31	169	30,8%
Total	144	148	135	122	549	100%

3.7.Results

The method used to analyze the results was two-way between groups analysis of variance (also known as two-way ANOVA) because it allow the verification of possible interactions amongst the 2 independent variables in this study (intention: low/high, and motivation: incidental/intentional), and at the same time compare means between the groups in

each of the independent variable to check if there are significant differences in the scenarios explored in the experiment.

To test for possible covariates, ANCOVA method was used. Prior to use ANCOVA however, it is important to test for each possible covariate to verify if the possible covariate is influenced by the treatment (independent variables of the study). One-way ANOVA test was run for each possible covariate to verify if these covariates are significantly influenced by the independent variables (purchase intention and motivation) of the study. If a significant value is found, the covariate cannot be used in ANCOVA as it is also influenced by the treatment (Valle & Rebelo, 2002). Table 28 presents the significance level of one-way ANOVA for each possible covariate in the study. Results show that only the covariate “informed fun in the activity” cannot be used in ANCOVA study as it is also affected by the treatment in the study.

Table 30 Analysis of interaction of independent variables in covariates

Covariates	p value
Enjoy Activity Scale	0.318
Serendipity Scale	0.622
Product Involvement Scale	0.28
Obsessive Compulsive Scale	0.432
Impulsive Scale	0.183
Informed Product Interest	0.573
Informed Fun in the activity	0.032
Gender	0.894
Income	0.063
Ethnicity	0.300
Age	0.441
Group of Browse Time	0.545
Interest in the Activity scale	0.904

It is also important to test the reliability of the scales used in the study. Table 29 presents the Alfa Cronbach for each scale in the study. All of them present a good reliability with Alpha Cronbach over 0.8, except for Lose track of time scale (Alpha Cronbach = 0.693). Therefore, Lose Track of Time is not used in this study.

Table 31 Alpha Cronbach values for scales used in the study

Scale	Items	Alpha Cronbach
Serendipity	4	0.883
Product Involvement	4	0.936
Product Knowledge	3	0.82
Enjoyment of the Activity	3	0.919
Lose track of time	3	0.693
Interest in the Activity	4	0.841
Obsessive Compulsive scale	3	0.811
Impulsive Scale	3	0.846

Results are presented in the following manner: for the two main dependent variables: product knowledge and purchase intention, the main result of Two-way ANOVA is presented, with the visual graphic of the model. All possible covariates are analyzed and only results that change the main effect of the independent variables and/or their interaction to statistically significant are reported.

For all the other possible dependent variables, table present the p value for main effect and interaction of the independent variable, and the Partial ETA squared for the most significant value found in each dependent variable. Table 30 presents the results of this analysis. Significant values are highlighted. $P < 0.05$ is in bold and grey background, and $p < 0.10$ is in bold. For product knowledge, Frustration and Joy present statistically significant results, and these dependent variables are discussed later in this section.

Table 32 Analysis of dependent variables in study 1

Dependent Variable	Intention	Motivation	Intercept	Partial ETA Squared
Joy	0.46	0.6	0.059	0.007
Optimism	0.388	0.455	0.362	0.002
Excitement	0.319	0.908	0.129	0.004
Irritation	0.583	0.389	0.501	0.001
Frustration	0.829	0.021	0.752	0.01
Happiness	0.576	0.918	0.243	0.002
Hope	0.52	0.841	0.83	0.001
Sadness	0.358	0.116	0.119	0.004
Boredom	0.762	0.213	0.19	0.003
Product Knowledge	0.233	0.565	0.571	0.003
Purchase Intention	0.118	0.19	0.323	0.004
Find new Brands	0.83	0.661	0.871	0.0001
Change in Product Interest	0.822	0.933	0.945	0.0001

3.7.1 Product Knowledge

A two-way between-groups analysis was conducted to explore the impact of intention during COB (low/high) and motivation (incidental/intentional) on subjective product knowledge. The interaction of intention and motivation was not statistically significant $F(1,545)=0.321$, $p=0.571$. There was no statistically significant main effect for intention $F(1,545) = 1.427$, $p=0.233$, and also no statistically significant main effect for motivation $F(1,545) = 0.331$, $p=0.565$. Table 31 lists the results of the test of between-subjects effect for product knowledge.

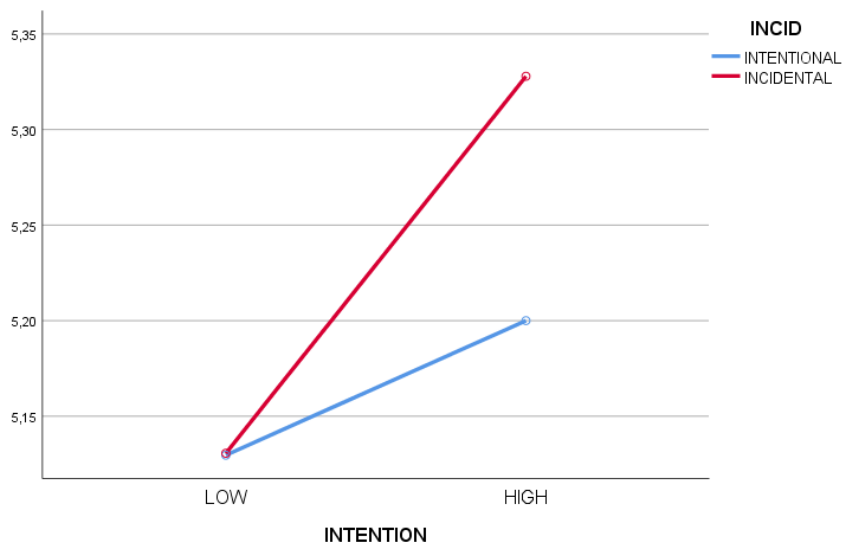
Table 33 Test of between-subjects effect for product knowledge

	Type III sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected model	3.378 ^a	3	1.126	.658	.578	.004
Intercept	14746.338	1	14746.338	8613.003	.000	.940
INTENTION	2.444	1	2.444	1.427	.233	.003
MOTIVATION	.567	1	.567	.331	.565	.001
INTENTION * MOTIV	.549	1	.549	.321	.571	.001
Error	933.096	545	1.712			
Total	15731.556	549				
Total	936.474	548				

R Squared = .442 (Adjusted R Squared = .438)

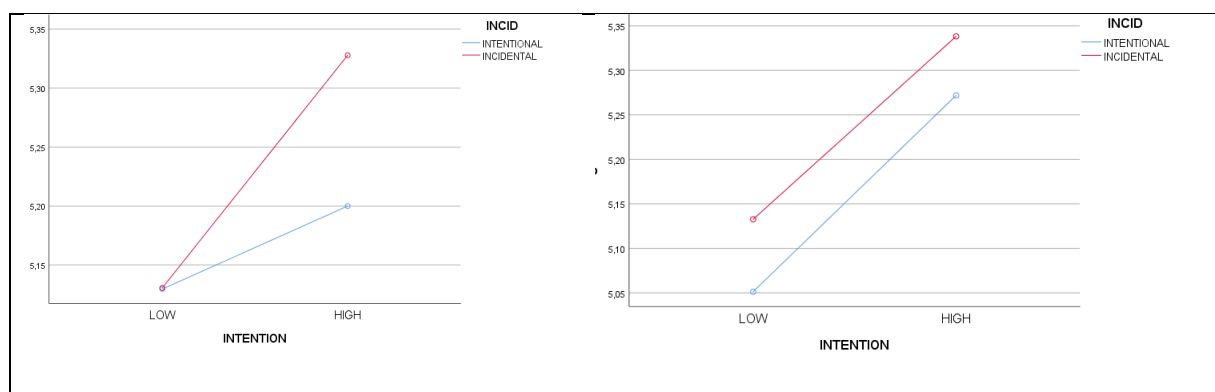
Figure 19 showcases the plotted estimated marginal means for product knowledge for the two independent variables. In LOW condition, means the same for both incidental and intentional scenarios. As expected, in high intention, product knowledge is higher for both motivation conditions, however these differences are no statistically significant.

Figure 19 Intention and motivation estimated marginal means for product knowledge



When I analyzed the effect of possible covariates in product knowledge, only product involvement showed a relevant effect in product knowledge. There is a significant effect of intention on product knowledge after controlling for product involvement $F(1,545) = 5.207$, $p=0.023$, with partial η^2 0.009. It is also possible to verify the effect on the graphic representation of the model, as it is seen figure 20.

Figure 20 Side by side comparison of effect of covariate product involvement on dependent variable product knowledge



3.7.2. Purchase Intention

A two-way between-groups analysis was conducted to explore the impact of intention during COB (low/high) and motivation (incidental/intentional) on purchase intention. The

interaction of intention and motivation was not statistically significant $F(1,545)=0.978$, $p=0.323$. There was no statistically significant main effect for intention $F(1,545) = 2.458$, $p=0.118$, and also no statistically significant main effect for motivation $F(1,545) = 1.723$, $p=0.190$. Table 32 lists the results of the test of between-subjects effect for product knowledge.

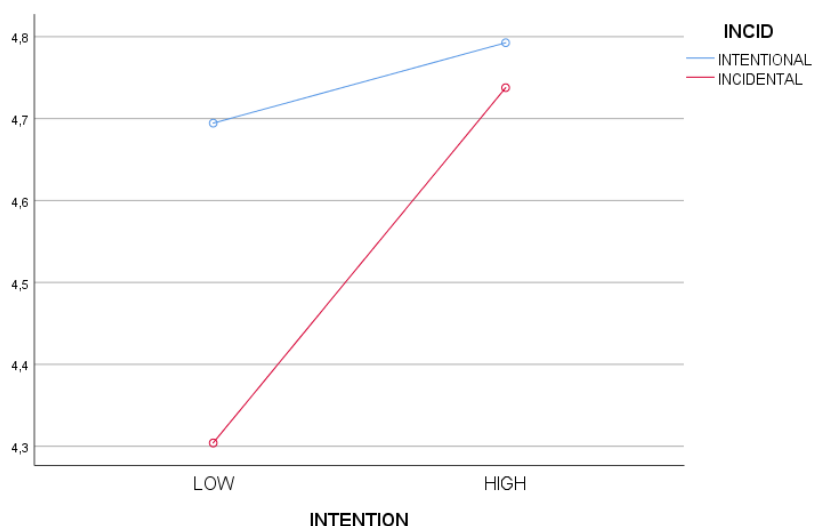
Table 34 Test of between-subjects effect for purchase intention

	Type III Sum of Squared	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected model	21.279 ^a	3	7.093	1.807	.145	.010
Intercept	11715.148	1	11715.148	2983.988	.000	.846
INTENTION	9.650	1	9.650	2.458	.118	.004
MOTIVATION	6.766	1	6.766	1.723	.190	.003
INTENTION * MOTIV	3.841	1	3.841	.978	.323	.002
Error	2139.672	545	3.926			
Total	13894.000	549				
Total	2160.951	548				

R Squared = .01 (Adjusted R Squared = .04)

Figure 21 presents the plotted estimated marginal means for product knowledge for the two independent variables. As expected, in HIGH intention, purchase intention is higher for both motivation conditions. For incidental COB the difference is accentuated, however, no statistically significant.

Figure 21 Estimated marginal means for purchase intention



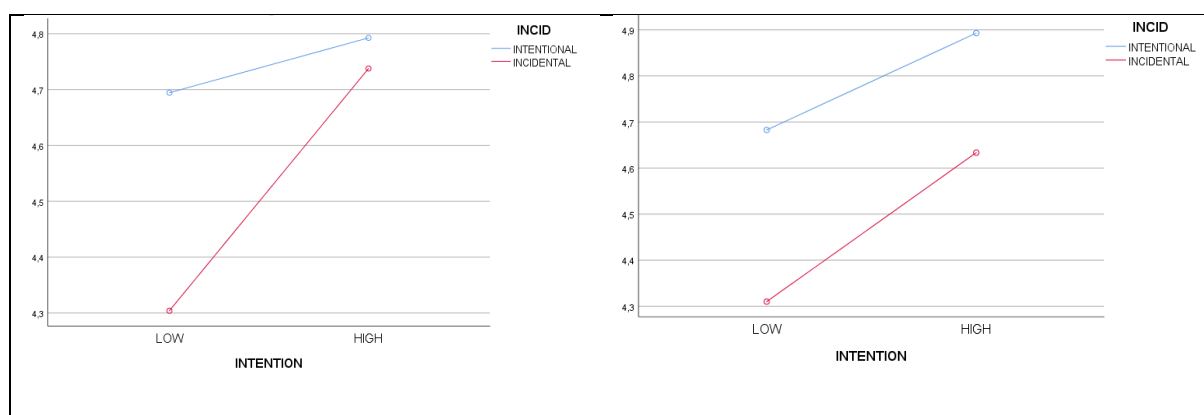
When I analyzed the effect of possible covariates on purchase intention, three covariates showed a relevant effect in purchase intention: informed product interest, product involvement, and interest in the activity.

There is a significant effect of intention on purchase intention after controlling for informed product interest. $F(1,544) = 4.392$, $p=0.037$, with partial ETA squared 0.008, and there is significant effect of motivation on purchase intention after controlling for informed product interest. $F(1,544) = 6.149$, $p=0.013$, with partial ETA squared 0.011. Results are detailed in Table 33. It is also possible to verify the effect on the graphic representation of the model, as it is seen figure 22.

Table 35 Test of between-subjects effect for purchase intention with informed product interest as covariate

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial eta squared
Corrected model	956,116 ^a	4	239,029	107,925	,000	,442
Intercept	7,940	1	7,940	3,585	,059	,007
Product Interest	934,837	1	934,837	422,092	,000	,437
INTENTION	9,727	1	9,727	4,392	,037	,008
MOTIVATION	13,619	1	13,619	6,149	,013	,011
INTENTION * MOTIV	,436	1	,436	,197	,658	,000
Error	1204,835	544	2,215			
Total	13894,000	549				
Total	2160,951	548				

Figure 22 Side by side comparison of effect of covariate informed product interest on dependent variable purchase intention



There is a significant effect of intention on purchase intention after controlling for product involvement. $F(1,544) = 6.938$, $p=0.008$, with partial ETA squared 0.013. Results are

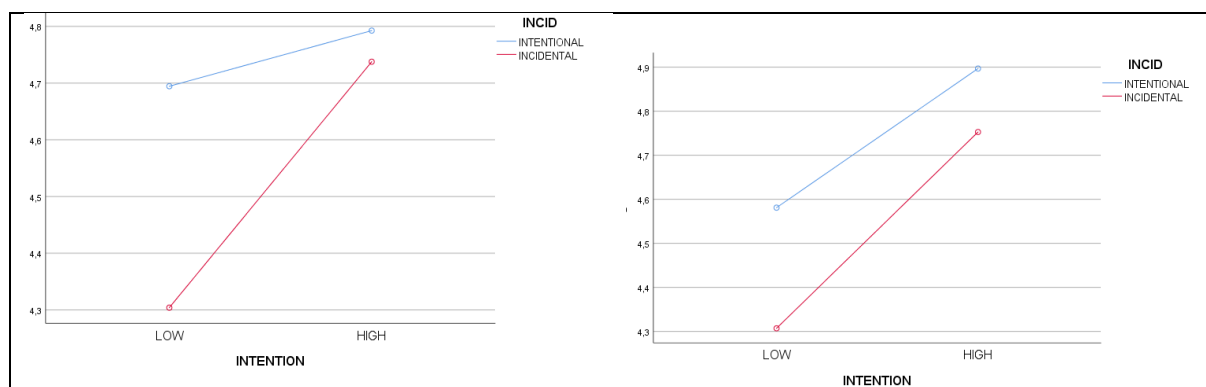
detailed in Table 34. It is also possible to verify the effect on the graphic representation of the model, as it is seen figure 23.

Table 36 Test of between-subjects effect for purchase intention with product involvement as covariate

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Model corrected	624.142 ^a	4	156.036	55.234	.000	.289
Intercept	22.169	1	22.169	7.847	.005	.014
Involvement Scale	602.864	1	602.864	213.402	.000	.282
INTENTION	19.726	1	19.726	6.983	.008	.013
MOTIVATION	5.962	1	5.962	2.111	.147	.004
INTENTION * MOTIV	.575	1	.575	.203	.652	.000
Error	1536.809	544	2.825			
Total	13894.000	549				
Total	2160.951	548				

R Squared = .289 (Adjusted R Squared = .284)

Figure 23 Side by side comparison of effect of covariate product involvement on dependent variable purchase intention

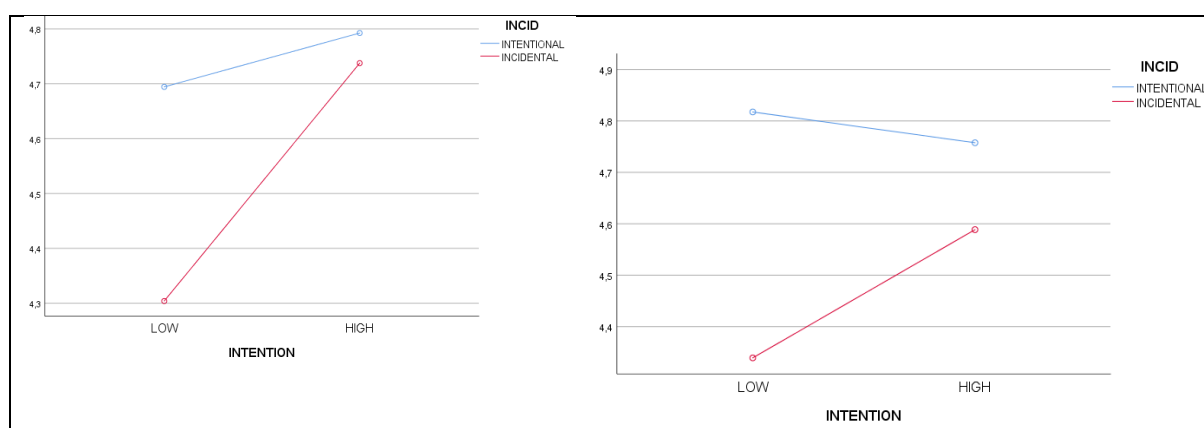


There is a significant effect of motivation on purchase intention after controlling for interest in the activity. $F(1,544) = 5.445$, $p=0.020$, with partial ETA squared 0.010. Results are detailed in Table 35. It is also possible to verify the effect on the graphic representation of the model, as it is seen figure 24.

Table 37 Test of between-subjects effect for purchase intention with interest in the activity as covariate

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected model	735.604 ^a	4	183.901	70.188	.000	.340
Intercept	12.396	1	12.396	4.731	.030	.009
InterActivitSCALE	714.325	1	714.325	272.631	.000	.334
INTENTION	1.220	1	1.220	.465	.495	.001
MOTIVATION	14.267	1	14.267	5.445	.020	.010
INTENTION * MOTIVATION	3.262	1	3.262	1.245	.265	.002
Error	1425.347	544	2.620			
Total	13894.000	549				
Corrected Total	2160.951	548				

R Squared = .340 (Adjusted R Squared = .336)

Figure 24 Side by side comparison of effect of covariate interest in the activity on dependent variable purchase intention

3.7.3. Other dependent variables

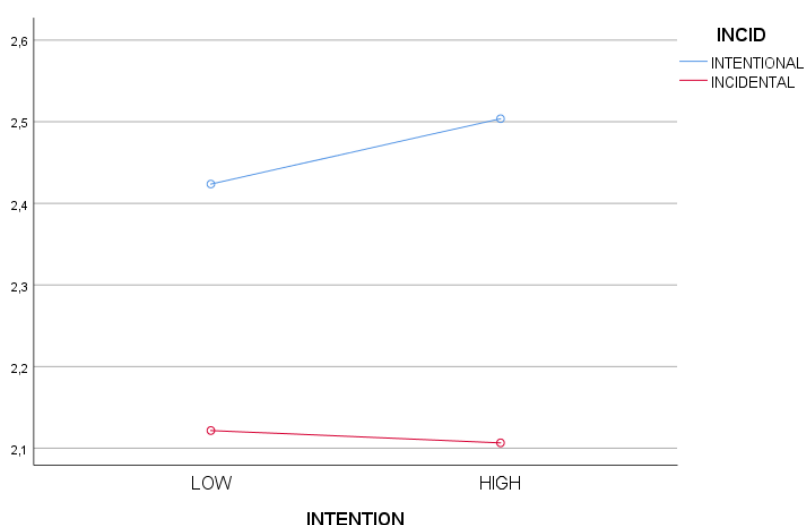
There are two dependent variables that showed statistically significant results to report in this experiment: Frustration and Joy. A two-way between-groups analysis was conducted to explore the impact of intention during COB (low/high) and motivation (incidental/intentional) on frustration. The interaction of intention and motivation was not statistically significant $F(1,545)=0.100$, $p=0.752$, however the interaction of motivation was statistically significant $F(1,545)=5.384$, $p=.021$. It is a small effect, with partial eta squared = 0.010. There was no statistically significant main effect for intention $F(1,545) = 0.047$, $p=0.892$. Table 36 lists the results of the test of between-subjects effect for frustration.

Table 38 Test of between-subjects effect for frustration

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected model	17.036 ^a	3	5.679	1.833	.140	.010
Intercept	2860.335	1	2860.335	923.326	.000	.629
INTENTION	.144	1	.144	.047	.829	.000
MOTIVATION	16.679	1	16.679	5.384	.021	.010
INTENTION * MOTIVATION	.309	1	.309	.100	.752	.000
Error	1688.333	545	3.098			
Total	4588.000	549				
Corrected Total	1705.370	548				

R Squared = .010 (Adjusted R Squared = .005)

Frustration is higher when the motivation is intentional, and intention to purchase is high. For incidental COB frustration is almost the same for low or high intention. None of these differences are statistically different, however. Figure 25 showcases this information.

Figure 25 Estimated marginal means for frustration

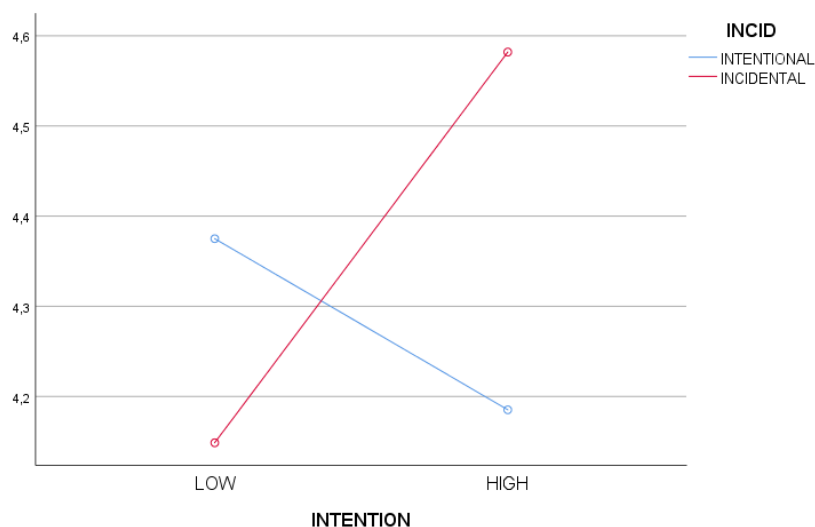
A two-way between-groups analysis was conducted to explore the impact of intention during COB (low/high) and motivation (incidental/intentional) on joy. The interaction of intention and motivation was statistically significant $F(1,545)=3.574$, $p=0.059$. It is a small effect, with partial eta squared = 0.007. The main effect of motivation was not statistically significant $F(1,545)=0.267$, $p=0.605$ and neither the main effect for intention $F(1,545) = 0.546$, $p=0.460$. Table 37 lists the results of the test of between-subjects effect for joy.

Table 39 Test of between-subjects effect for joy

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected model	15.583 ^a	3	5.194	1.401	.242	.008
Intercept	10201.960	1	10201.960	2751.786	.000	.835
INTENTION	2.023	1	2.023	.546	.460	.001
MOTIVATION	.991	1	.991	.267	.605	.000
INTENTION * MOTIVATION	13.250	1	13.250	3.574	.059	.007
Error	2020.530	545	3.707			
Total	12250.000	549				
Corrected Total	2036.113	548				

R Quadrado = .008 (R Quadrado Ajustado = .002)

It is possible to visualize the interaction effect on figure 26. When motivation for COB is incidental, consumers with low intention experience less joy in browsing than consumers in high intention. However, when COB is intentional, the opposite occurs: consumers with low intention experience more joy than those with high intention. Two covariates impact on this interaction: impulsiveness and interest in the activity.

Figure 26 Estimated marginal means for joy

There is a significant effect of the interaction of motivation and intention on joy after controlling for impulsiveness. $F(1,544) = 4.477$, $p = 0.035$, with partial ETA squared 0.008, results are detailed in table 38.

Table 40 Test of between-subjects effect for joy with impulsiveness as covariate

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Model corrected	160,771 ^a	4	40,193	11,659	,000	,079
Intercept	690,153	1	690,153	200,200	,000	,269
ImpSCALE	145,189	1	145,189	42,116	,000	,072
INTENTION	2,899	1	2,899	,841	,360	,002
MOTIVATION	1,792	1	1,792	,520	,471	,001
INTENTION *MOTIV	15,433	1	15,433	4,477	,035	,008
Error	1875,342	544	3,447			
Total	12250,000	549				
Corrected Total	2036,113	548				

a. R Quadrado = ,079 (R Quadrado Ajustado = ,072)

There is a significant effect of the interaction of motivation and intention on joy after controlling for interest in the activity. $F(1,544) = 5.255$, $p=0.022$, with partial ETA squared 0.010, results are detailed in table 39.

Table 41 Test of between-subjects effect for joy with interest in the activity as covariate

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected model	781.882 ^a	4	195.470	84.782	.000	.384
Intercept	.418	1	.418	.181	.670	.000
InterActivitSCALE	766.299	1	766.299	332.368	.000	.379
INTENTION	.418	1	.418	.181	.671	.000
MOTIVATION	.051	1	.051	.022	.882	.000
INTENTION * MOTIV	12.117	1	12.117	5.255	.022	.010
Error	1254.231	544	2.306			
Total	12250.000	549				
Corrected Total	2036.113	548				

. R Squared = .384 (Adjusted R Squared = .379)

3.7.4. Manipulation check

As mentioned before, there were three ways to check for manipulation: one question directly asking respondents about their behavior, and two other questions where they informed how they felt a sense of exploration or a sense of goal. The first manipulation check aimed to directly assess the two different type of search behavior: exploratory (low purchase intention) and focused on a goal (high purchase intention). The second question asked specifically is participants felt they were exploring products, and the third asked if they felt they were looking for a focused product.

The first question showed that the manipulation of intention was successful. A one-way ANOVA was conducted to explore if the means on two intention groups (low vs high) were different. The option related to low purchase intention was 1, and the option to high was -1. Results show that there is a statistically significant difference $Z(1,547) = 6.566$, $p=0.011$, and the difference was in the right direction with estimated mean for low ($M=0.53$) were higher than the estimated mean for high intention. ($M=0.34$). Tables 40 and 41 present the results of ANOVA.

Table 42 Estimated marginal means to check manipulation for intention condition

	N	Mean	Std Deviation	Std Error	95% Confidence interval	
					Lower Bound	Upper Bound
LOW	292	.53	.847	.050	.44	.63
HIGH	257	.34	.943	.059	.22	.45
Total	549	.44	.898	.038	.37	.52

Table 43 ANOVA results to check manipulation for intention condition

	Sum of Squares	df	Mean square	Z	Sig.
Between Groups	5.236	1	5.236	6.566	.011
Within Groups	436.206	547	.797		
Total	441.443	548			

The other two specific questions to check intention manipulation did not work. The question related to feeling exploring products where estimated marginal mean for low intention should be higher than in the high intention, the results were reversed, with high intention ($M=4.76$) presenting a higher estimated mean than the low condition ($M=4.66$), not statistically significant $z(1,547) = 0.352$, $p=0.552$. The question related to feeling focused on a goal, the direction of the means are correct: participants in high intention condition presented a higher estimated mean ($M=4.82$) than participants in low intention condition ($M=4.59$) but the difference was not statistically different $z(1,547) = 2.150$, $p= 0.143$.

3.8.Discussion

Results on product knowledge are related to the analysis of hypotheses 3 and 4. There was no statistically significant result on the main effect of the independent variables and neither of their interaction. It is possible to affirm the H3 and H4 are not supported, when taking into consideration these results. There is, however, a statistically significant main effect of intention

on product knowledge ($p=0.023$) when controlling for product involvement. It is a small effect (partial eta squared = 0.009). This means that when the involvement with the product is considered, hypothesis 3 may be supported. It is also expected that consumers browse for products they are involved with (Bloch et al., 1986; Jayawardhena & Wright, 2009) so it is proposed that H3 is partially supported.

Results on purchase intention are related to the analysis of hypotheses 3a and 4a. There was no statistically significant result on the main effect of the independent variables and neither of their interaction. It is possible to affirm the H3a and H4a are not supported, when taking into consideration these results. There is, however, a statistically significant main effect of intention on purchase intention when controlling for informed product interest ($p=0.037$). It is a small effect (partial eta squared = 0.008), and also when controlling for product involvement ($p=0.008$), with a higher but still small effect (partial eta squared = 0.013). These effects make it H3a supported when product involvement or product interest are considered, suggesting then a partial support for this hypothesis.

There is also a statistically significant main effect of motivation on purchase intention when controlling for product interest ($p=0.013$). It is a small effect (partial eta squared = 0.011), and also when controlling for interest in the activity ($p=0.02$), also small effect (partial eta square = 0.010). These effects make it possible to suggest a partial support for H4a, as it is possible to find effects when consumers are interest in the product, and/or in the activity of COB.

From the other dependent variables analyzed in this study, Frustration and Joy presented results that are statistically significant. Motivation presented statistically significant result for Frustration, showing that consumers feel more frustrated when engaging in COB intentionally than incidentally. One possible explanation for that effect is that when consumers engage in COB based on their decision, they feel more responsible for the time spent browsing than when they do it unintentionally. This information was discussed in the exploratory interviews mentioned in chapter 3, where interviewees that reported intentionally browsing mentioned feeling frustrated for two reasons: when they cannot engage in COB in their daily routine (“I could not browse in Westwing this morning because I had a meeting early in the morning, and I keep wondering what I missed, wishing I could have done it.”- Sioban) or when they realize that they could have used the time they allocated to browse in another activity (“Now that we

are discussing this, I feel kind of a regret for spending so much time every day at Privalia, and never buying anything there, I know feel that this makes no sense”- Alex).

Dependent variable joy presented a statistically significant interaction of motivation and intention on joy: when consumers are in COB behavior in a more exploratory type of search, with low purchase intention, the joy they feel is higher than when they are in COB behavior with a high purchase intention, more focused type of search. However, when they engage in COB incidentally, the effect is reversed: those with high purchase intention experience greater joy than those with low purchase intention. This might be explained with the thrill of shopping, a concept that is discussed in consumer behavior literature (Bardhi & Arnould, 2005; Jayawardhena & Wright, 2009; Schindler, 1989), and as the manipulation mentioned that they were prompted to browse for the sneakers they have been looking for, the incidental characteristic may have triggered this thrill in those in the high purchase intention scenario.

Even though it was not possible to find support for hypotheses 3, 3a, 4, and 4a, these results showed partial support for hypotheses 3, 3a, and 4a. The manipulation used in this experiment was very subtle and relied on participants imagine themselves in the suggested scenarios. The objective of this type of manipulation used in this study was to mimic as close as possible a real COB situation. There was also no predefined minimum time for browsing, so respondents could control their COB behavior as close to what they do in their lives. Studies 2 and 3 use different types of manipulation, aiming to explore these hypotheses in a different manner. They are explained in the following sections.

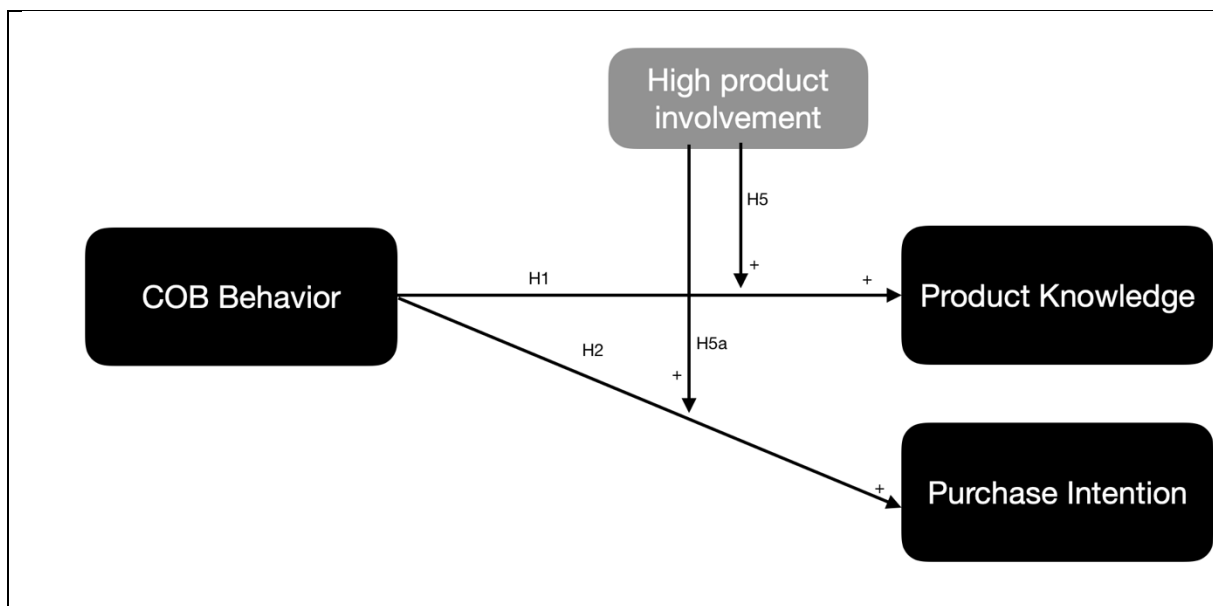
4. Experiment 2: Product involvement impacts on COB and Prepurchase

4.1. Overview of the experiment

The objective of experiment 2 is to verify if there is an effect of COB behavior on dependent variables Product Knowledge (PK) and Purchase Intention (PI) in comparison with the Prepurchase behavior, where consumers are interested not in browsing, but in comparing options to make a better buying decision (Engel & Roger, 1978), performing a more direct

buying type of search (Moe, 2003a). The objective of this experiment is to test if COB behavior impacts positively consumers PK and PI, testing hypotheses 1 and 2. As mentioned in the literature review of this paper, product involvement hypothetically mediates the impact of COB behavior on the dependent variables. This experiment also aims to test hypotheses 5, and 5a, related to the positive impact of high product involvement on the impact of COB on PK and PI. This is a 2 (COB/Prepurchase) x 2 (High/low involvement) experiment design. Figure 27 illustrates the hypotheses tested in this experiment.

Figure 27 Hypotheses testes in Study 2



As it is difficult to draw the line between searching and buying (Bloch et al., 1986; Rowley, 2001), the manipulation used in this study aims to make participants perform these two different types of search in the same website. In COB manipulation, participants are asked to browse in a website, looking for options they find interesting, and in Prepurchase (PP) manipulation they are presented with 2 links of products so they compare and choose which one of them they would buy. The website used for the experiment was the same across all the 4 conditions, with the only difference that in COB condition participants clicked on a link that directed them to a page where they could explore the products, and in PP condition they were directed to links of products from the same website, on a specific product. They need to navigate in the page to see the characteristic of the same product, and they could browse for other products if they wanted to.

The main dependent variables are product knowledge and purchase intention (as they are part of the hypotheses tested). Purchase intention is measured in two different ways. PI now and PI future. Ten possible covariates were included in design of the experiment, demographics: age, gender, income, and online behavior, personality traits: compulsiveness, impulsiveness, discussed in chapter 2, related to the activity: change in product interest, browsing time, three dimensions of flow and interest in the activity performed.

4.2. Method and Procedures

To manipulate product involvement, it was necessary to choose which type of product would be used in the browsing activity. To verify which kind of product respondents would be more interest in and least interest in, I conducted a pre-test asking participants to elect their preferred products to search for, in the current moment of their lives. I selected seven different products from three categories: consumer goods, durable goods and services, and run a survey simply asking respondents to choose their favorite product in each category.

Participants were recruited in social media channels Facebook and Twitter, and this pre-test obtained 121 valid responses. 57.9% of participants were female, 36.4 % in the age range of 41-50 years old. Demographics information are detailed in Table 42.

Table 44 Demographic information of participants in pretest

Gender	n	
Feminine	70	57,9%
Male	51	42,1%
Age	n	
21 - 30	26	21,5%
31 - 40	28	23,1%
41 - 50	44	36,4%
51 - 60	12	9,9%
60+	11	9,1%
Total	121	

In consumer goods there was a tie between books and sneakers as product consumers are more interested in. Formal Wear was the least interested product. In Services airline tickets ranked first and spa treatments ranked last. And in durable goods furniture obtained almost half of the preference, while motorcycles were mentioned only once as most interest product. In

high involvement condition, I opted to use these products in the experiment: books, vacation destination and furniture. In services category, vacation destination was chosen as a mix of vacation trips with airline tickets. In low involvement condition, the products chosen for the experiment were: formal wear, spa treatments and tablets. Table 42a presents the results of the pretest, and the products highlighted in the table were the chosen ones for the experiment.

Table 42a Results of pretest - product choice

Consumer good	n	
Books	28	23,1%
Sneakers	28	23,1%
Shoes	21	17,4%
Apparel	21	17,4%
Accessories	18	14,9%
Beachwear	3	2,5%
Formal Wear	2	1,7%
Service	n	
Airline tickets	36	29,8%
Restaurants	28	23,1%
Vacation trips	24	19,8%
Courses	14	11,6%
Cultural events	12	9,9%
Hotels	4	3,3%
Spa Treatments	3	2,5%
Durable Goods	n	
Furniture	51	42,1%
Mobile	23	19,0%
Laptop	18	14,9%
Luxury watch or bag	13	10,7%
Cars	12	9,9%
Tablet	3	2,5%
Motorcycles	1	0,8%
Total	121	

When participants accessed the experiment, they were randomly assigned to one of the four conditions: COB/High involvement, COB /low involvement, PP/high involvement, and PP/low involvement. To manipulate involvement in the experiment, the first question participants had to answer was: “please choose amongst the three products listed below which one you are more interested in browsing for in this current moment of your life.” And then a

list of the three products (one for each category) that ranked higher as more interested in the pretest are presented. This way, product involvement was manipulated in two stages: first they were presented with options that are ranked higher in the product interest pretest, and then the participant would choose the product they were more interested in, amongst the three options offered. The manipulation in the low condition had the same dynamics: the three products that ranked lower were presented as options, and participants were asked to choose the one they were least interested in browsing for.

Instructions on what to browse for and the link for browsing were used as a way to manipulate for COB/PP condition: in COB condition, participants were asked to browse through the products and choose 2 products of their like and return to the question and fill in the name of the products they chosen. The link included in the experiment led them to a landing page where they could find several products to browse. In PP condition, participants were asked to compare 2 pre-defined options and choose which one they would prefer to buy. The links included in the experiment take them directly to each product and these products are shown in the same website used in the COB condition. The manipulation texts are presented in Table 43, words in bold are the ones used to manipulate COB in each experiment condition.

Table 45 Manipulation texts used in experiment 2

COB	Involvement	Manipulation
COB	High	Now we ask you to search the website below (see the link), looking for 2 books that you could give as a gift to a friend who likes to read.
COB	Low	Now we ask you to search the website below (click on the link), looking to find 2 possible looks that you would like to use to attend a friend's wedding.
PP	High	Now, we ask you to compare 2 different books and choose the best option to give as a gift to a friend who likes to read, by clicking on the links below: The idiot The Man Who Loved Dogs
PP	Low	Now, we ask you to compare 2 possible looks to go to a friend's wedding. If you prefer to wear a dress, choose one of these options: Mixed Animale If you prefer to wear a suit, choose one of these options: Calvin Klein Ricardo Almeida

As involvement manipulation included the possibility for respondents to choose the product of their choice, twelve different webpages and products were selected to run the experiment. Table 44 below presents each website used in the experiment.

Table 46 Websites used in the four conditions of the experiment

Condition	Product	Website
COB High Involvement	Book	https://www.amazon.com.br/gp/browse.html?node=16495864011&ref=nav_em_T1_0_4_6_6_books_editorspick
	Furniture	https://www.tokstok.com.br/inspire-se/collections
	Destination	https://www.melhoresdestinos.com.br/ferias-2020-dicas.html
COB Low Involvement	Formal wear	https://www.shop2gether.com.br/feminino/roupas/vestidos.html?cat=323 (dresses) https://www.shop2gether.com.br/catalog/category/view/id/9473 (suits)
	Tablet	www.submarino.com.br/busca/tablet
	Spa treatment	http://www.br.thespaatrenaissancesp.com/sao-paulo-spa/Massagens-58.html
PP High involvement	Book	Option 1 : www.livrariacultura.com.br/p/livros/literatura-internacional/romances/o-idiota-666867 or Option 2: https://www.livrariacultura.com.br/p/livros/literatura-internacional/latino-americana/o-homem-que-amava-os-cachorros-42962138
	Furniture	Option 1: https://www.desmobilia.com.br/produto/dudek-4594 OR option 2: https://www.desmobilia.com.br/produto/nakki-4396
	Destination	Option 1: https://www.tripadvisor.com.br/Tourism-g294454-Zagreb_Central_Croatia-Vacations.html OR Option 2: https://www.tripadvisor.com.br/Tourism-g294472-Belgrade-Vacations.html
PP Low involvement	Formal wear	dress 1: https://www.shop2gether.com.br/vestido-midi-juliete.html or dress wh https://www.shop2gether.com.br/vestido-longo-no-alas-preto.html OR suit 1 https://www.shop2gether.com.br/costume-slim-pv-25.html Or suit 2 https://www.shop2gether.com.br/blazer-s510012-7.html
	Tablet	Option 1: https://www.submarino.com.br/produto/49845114/tablet-samsung-galaxy-tab-a-t590-32gb-wifi-ss-10-5-8-5mp-preto?pfm_carac=tablet&pfm_index=4&pfm_page=search&pfm_pos=grid&pfm_type=search_page OR Option 2: https://www.submarino.com.br/produto/1204309093/tablet-xiaomi-mi-pad-4-wifi-8-64gb-4gb-preto?pfm_carac=tablet&pfm_index=22&pfm_page=search&pfm_pos=grid&pfm_type=search_page
	Spa treatment	Option 1: https://www.aigaispa.com.br/services OR Option 2: https://flutuar.me/v2/

4.3.Measures

Dependent variable Product Knowledge was measured using subjective product knowledge scale (Park & Moon, 2003) as it addresses directly the subjective product knowledge perception consumers have. Purchase intention was measured with two direct question: “How likely are you to buy a product similar to the one you browser for in the next days?” and “How likely are you to buy a product similar to the one you browser for in the next months?”, assessing purchase intention now and in the future. These questions used a 7-points Likert scale.

Change in product interest was measured using a direct question: “After browsing for the product in this survey, your interest for this product?”, followed by a 10-points scale where 0 was mentioned as “Reduced”, 5 as “Remained the same” and 10 as “Increased”.

Covariates obsessive and compulsive and impulsiveness were measured using these two dimensions of Ridgway et al., (2008) proposed scale for compulsiveness assessment. Three dimensions of flow scale (Payne et al., 2011) were chosen, with three items each: MAA (Merging action and awareness), TT (transformation of time) and AE (Autotelic experience). Interest in the activity was measured using 4 items scale (Moorman et al., 2002).

4.4.Manipulation and Attention Check

To check for manipulation for COB/PP it was included a direct question: “While you were performing the browsing activity, did you feel you were” and two options were presented: “comparing two alternatives”(PP intention) or “browsing through different product in the same category”(COB). To check for product interest, one direct question was asked: “How interest are you in the product you browsed for during this activity?” and a 10-points scale were presented, where 0 is Low, 5 is Average and 10 is High.

One attention question was included with two items to be responded. In a similar format of the way the other questions were presented in the questionnaire, the attention check was one of the last questions to be asked, with a 7-points Likert scale. The question was clearly identified as “attention check”: “The questions below are to **check your attention** when responding to this questionnaire. Please select the option defined in the sentences below. If you fail to do so, we will assume that you are not paying attention and will have to discard all of your answers.”and then 2 questions asked them to choose specific responses in the Likert scale: “Please select the disagree option” and “Please select the somewhat agree option”. The objective of this question was to actually filter respondents that were paying attention in the survey. I chose to include 2 questions to also filter respondents that choose the same option in Likert scale type of questions.

4.5.Pretest

Pretest was run on Toluna consumer panel, with 252 participants. 57 (22.6%) failed the attention check questions, and pretest has 195 (77.4%) valid responses. The distribution of respondents per cell is showcased in Table 45. About 100 participants per cell.

Table 47 Participants distribution per manipulation type - Pretest

	n	Browsing time		n	Browsing time
COB	99	112.14	HIGH	99	69.85
PP	96	56.48	LOW	96	79.23

Participants were most female (57.9%), with age ranging from 21-30 (44.6%), and an annual household income of less than R\$ 50K (52.3%). Demographic information is detailed on Table 46.

Table 48 Demographics of participants in pretest experiment 2

	COB HIGH	COB LOW	PP HIGH	PP LOW	Total	%
Total	33	30	66	66	195	
Gender						
Female	22	17	41	33	113	57,9%
Male	11	12	25	33	81	41,5%
Other		1			1	0,5%
Age						
< 21	3	1	4	4	12	6,2%
21 - 30	19	16	24	28	87	44,6%
31 - 40	5	8	18	17	48	24,6%
41 - 50	3	2	12	12	29	14,9%
51 - 60	3	2	5	5	15	7,7%
> 61		1	3		4	2,1%
Income						
< R\$ 25k	5	8	18	19	50	25,6%
R\$ 25K < R\$ 50K	8	9	19	16	52	26,7%
R\$ 50K < R\$ 75K	8	3	12	14	37	19,0%
R\$ 75K < R\$ 100K	4	5	7	8	24	12,3%
R\$ 100K < R\$ 125K	3	3	3	2	11	5,6%
> R\$ 125K	5	2	7	7	21	10,8%

The only issue that was identified as problematic to the experiment is the time allocated for browsing. In despite of the COB condition, where the time allocated for the browsing activity was 112.1 seconds, almost 2 minutes, all the other three conditions presented a browsing time of about 1 minute (PP 56.5 seconds, High involvement 69.8 and Low involvement 79.2). This happened because there was no minimum time to perform the activity. The minimum time was mentioned in the instruction but there were no impediments to perform the activity in less time. With that information, I decided to include 90 seconds as a minimum time to perform the browsing activity during the experiment.

The manipulation of involvement was successful. A one-way ANOVA was conducted to explore if the means on two involvement groups (low vs high) were different. High involvement is supposed to rate higher in the direct question related to involvement, included in the experiment as a manipulation check. Results show that there is a statistically significant difference $Z(1,193) = 13.202$, $p < 0.0001$, and the difference was in the right direction with estimated mean for high ($M=7.99$) were higher than the estimated mean for low involvement. ($M=6.69$).

The manipulation of COB, however, was not successful. A one-way ANOVA was conducted to explore if the means on two COB and PP groups were different. In the direct question related to COB, participants had to choose how they feel their search behavior was like, choosing 1 for COB and 2 for PP. Results show that even though the direction of the results is correct, where PP ($M=1.66$) presents a higher value than COB ($M=1.40$), this difference is not statistically significant $Z(1,193) = 1.880$, $p=0.171$.

4.6.Demographics of Participants

After pretest, experiment was conducted in Toluna consumer panel with 918 participants. 6 responses were incomplete (0.6%), 301 failed the attention check questions (32.8%), and experiment had 611 valid responses. Table 47 presents the allocation of participants for each cell and the allocated time for browsing activity.

Table 49 Participants per manipulation - experiment 2

	n	Browsing time		n	Browsing time
COB	390	160,30	HIGH	390	125,53
PP	221	101,76	LOW	221	113,28

As 90 seconds were defined as the minimum time allowed for the browsing activity, the time allocated increased for every manipulation. COB condition presented the higher time allocated to the browsing activity: 160.3 seconds (almost 3 minutes). All the other allocated time was above 90 seconds, with High involvement with 125.5 seconds, Low involvement with 113.3 seconds and PP condition with 101.8 seconds.

Participants were most women (64.2%), 21-30 years old (36.7%) or 31-40 years old (32.2%), annual household income between R\$ 25K and R\$ 50K (32.6%). Table 48 presents detailed demographics information of participants in experiment 2.

Table 50 Demographics of participants - experiment 2

	COB HIGH	COB LOW	PP HIGH	PP LOW	Total	%
Total	233	71	157	150	611	
Gender						
Female	128	43	107	114	392	64.2%
Male	104	28	50	36	218	35.7%
Other	1				1	0.2%
Age						
< 21	16	5	9	8	38	6.2%
21 - 30	84	23	58	59	224	36.7%
31 - 40	77	22	52	46	197	32.2%
41 - 50	34	8	21	19	82	13.4%
51 - 60	15	9	13	14	51	8.3%
> 61	7	4	4	4	19	3.1%
Income						
< R\$ 25k	48	26	49	41	164	26.8%
R\$ 25K < R\$ 50K	75	23	53	48	199	32.6%
R\$ 50K < R\$ 75K	42	8	16	20	86	14.1%
R\$ 75K < R\$ 100K	25	3	22	19	69	11.3%
R\$ 100K < R\$ 125K	18	4	4	12	38	6.2%
> R\$ 125K	25	7	13	10	55	9.0%

4.7. Results

The method used to analyze the results was two-way between groups analysis of variance (also known as two-way ANOVA) because it allow the verification of possible interactions amongst the 2 independent variables in this study type of search (COB/PP), and involvement (low/high), and at the same time compare means between the groups in each of the independent variable to check if there are significant differences in the scenarios explored in the experiment.

To test for possible covariates, ANCOVA method was used. Prior to use ANCOVA however, it is important to test for each possible covariate to verify if the possible covariate is influenced by the treatment (independent variables of the study). One-way ANOVA test was run for each possible covariate to verify if these covariates are significantly influenced by the independent variables (COB and involvement) of the study. If a significant value is found, the covariate cannot be used in ANCOVA as it is also influenced by the treatment (Valle & Rebelo, 2002). Table 49 presents the significance level of one-way ANOVA for each possible covariate in the study. Results show that covariates “interested in the activity”, “flow dimension 1”, and “flow dimension 2” cannot be used in ANCOVA study as it is also affected by the treatment in the study.

Table 51 Analysis of possibility of use ANCOVA with covariates

Covariates	p value
Obsessive Compulsive Scale	0.348
Impulsive Scale	0.089
Browsing time	0.123
Flow dimension 1	0.009
Flow dimension 2	0.647
Flow dimension 3	<0.0001
Interest in the Activity scale	<0.0001

It is also important to test the reliability of the scales used in the study. Table 50 presents the Alpha Cronbach for each scale in the study. Interest in the activity scale (Alpha Cronbach = 0.705) is not used in this study.

Table 52 Alpha Cronbach for scales used in experiment 2

Scale	Items	Alpha Cronbach
Flow dimension 1	3	0.83
Flow dimension 2	3	0.77
Flow dimension 3	3	0.92
Interest in the activity	3	0.705
Product knowledge	3	0.884
Obsessive Compulsive scale	3	0.798
Impulsive Scale	3	0.848

4.7.1. Product Knowledge

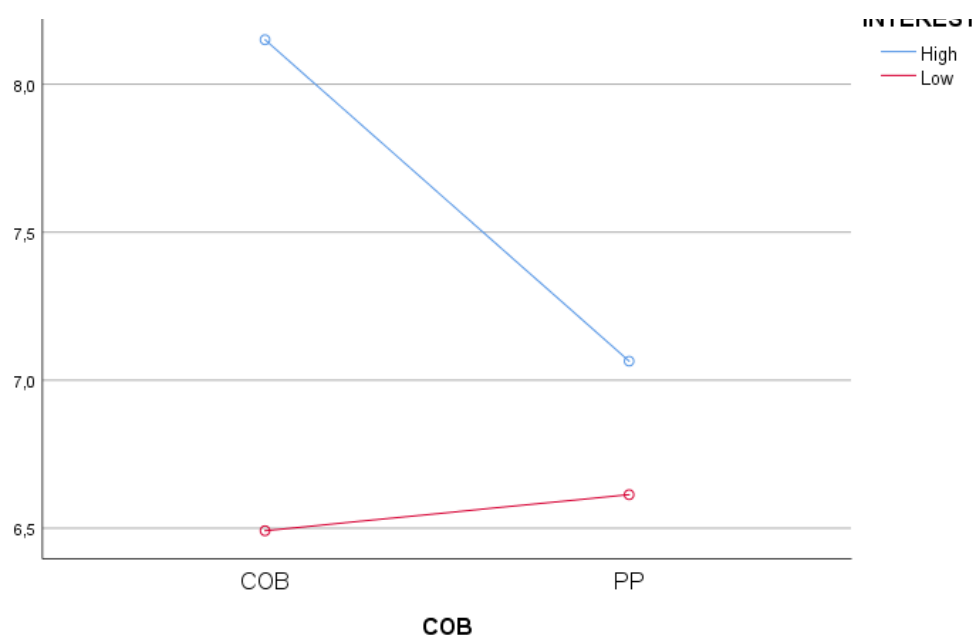
A two-way between-groups analysis was conducted to explore the impact of COB and involvement on product knowledge. The interaction of COB and involvement was statistically significant $F(1,607)=9.464$, $p=0.002$. The effect was small (partial eta squared = 0.015). The main effect of COB was also statistically significant $F(1,607)=6.032$, $p=0.014$. The effect was small (partial eta squared = 0.015). And the main effect for involvement $F(1,607) = 28.882$, $p<0.0001$. The effect size was medium to large (partial eta squared = 0.045). Table 51 lists the results of the test of between-subjects effect for product knowledge.

Table 53 Test of between-subjects effect for product knowledge

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	294.278 ^a	3	98.093	19.996	.000	.090
Intercept	25530.964	1	25530.964	5204.362	.000	.896
COB	29.590	1	29.590	6.032	.014	.010
INVOLVEMENT	141.685	1	141.685	28.882	.000	.045
COB * INVOLVEMENT	46.429	1	46.429	9.464	.002	.015
Error	2977.751	607	4.906			
Total	35842.440	611				
Corrected Total	3272.029	610				

a. R Squared = .090 (Adjusted R Squared = .085)

Figure 28 plots the marginal means for COB and involvement in product knowledge. Product knowledge is higher for COB ($M=8.15$) in comparison with PP (7.06) type of search when involvement is high. And it is smaller ($M=6.49$) than PP (6.61) when involvement is low.

Figure 28 Estimated marginal means for product knowledge - COB and involvement

As the interaction of COB and involvement is statistically significant ($p=0.002$), it is necessary to verify how COB means are dispersed in the Involvement condition. When analyzing the contrasts on COB, it is possible to verify that the impact of COB on the condition with High involvement is statistically significant $F(1,607)=110.601$, $p<0.0001$, but it is not statistically significant in low involvement condition $F(1,607)=0.146$, $p=0.703$. Table 52 presents the details of this contrast analysis.

Table 54 Contrast analysis for COB in low and high involvement conditions

INVOLVEMENT		Sum of Squares	df	Mean Square	F	Sig.
Low	Contrast	.715	1	.715	.146	.703
	Error	2977.751	607	4.906		
High	Contrast	110.601	1	110.601	22.545	.000
	Error	2977.751	607	4.906		

It is important to also verify the means for involvement in each of the COB conditions. It is possible to verify that the impact of involvement on the COB condition is statistically significant $F(1,607)=30.518$, $p<0.0001$, but it is not statistically significant on PP condition $F(1,607)=3.181$, $p=0.075$. Table 53 presents the details of this contrast analysis.

Table 55 Contrast analysis for involvement in COB and PP conditions

COB		Sum of Squares	df	Mean Square	F	Sig.
PP	Contrast	15.603	1	15.603	3.181	.075
	Error	2977.751	607	4.906		
COB	Contrast	149.713	1	149.713	30.518	.000
	Error	2977.751	607	4.906		

There is a main effect of COB on product knowledge ($p=0.014$), a main effect of involvement on product knowledge ($p<0.0001$), a statistically significant interaction of COB and involvement on product knowledge ($p=0.002$). This interaction is a statistically significant interaction of involvement in COB condition ($p<0.0001$) but not in PP condition ($p=0.075$), and it is a statistically significant of COB in high involvement ($p<0.0001$) but not in low involvement ($p=0.703$).

4.7.2. Purchase intention

A two-way between-groups analysis was conducted to explore the impact of COB and involvement on purchase intention. Purchase intention was assessed using two direct questions, one related to purchase intention now and one related to purchase intention in the future. The interaction of COB and involvement was statistically significant on purchase intention now $F(1,607)=4.671$, $p=0.031$. The effect was small (partial eta squared = 0.008). The main effect of COB was also statistically significant $F(1,607)=4.011$, $p=0.046$. The effect was small (partial eta squared = 0.007). And the main effect for involvement $F(1,607)=25.235$, $p<0.0001$. The effect size was medium to large (partial eta squared = 0.040). Table 54 lists the results of the test of between-subjects effect for purchase intention now.

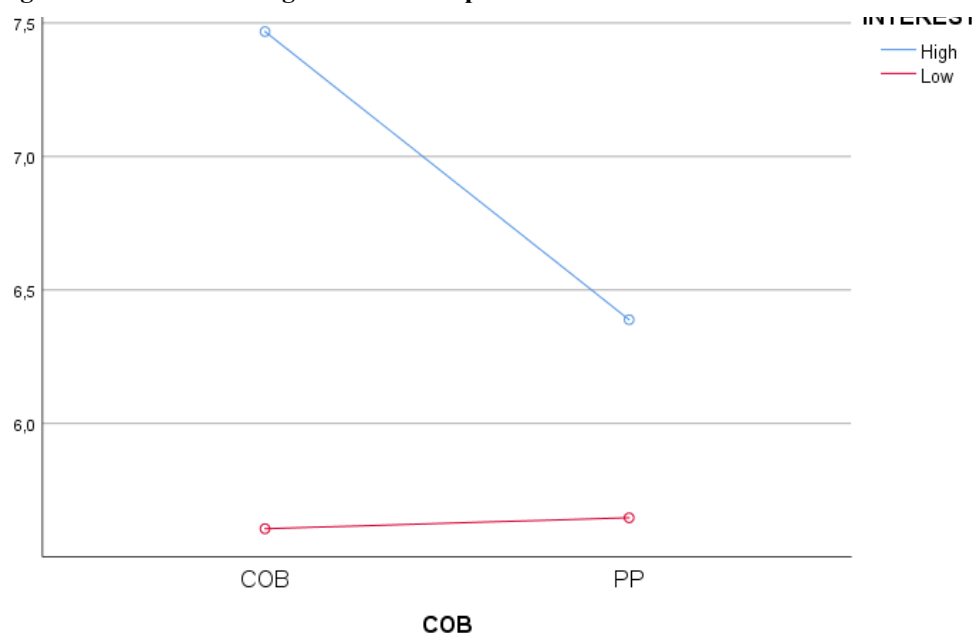
Table 56 Test of between-subjects effect for purchase intention now

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	385.765 ^a	3	128.588	15.032	.000	.069
Intercept	20069.884	1	20069.884	2346.139	.000	.794
COB	34.316	1	34.316	4.011	.046	.007
INVOLVEMENT	215.872	1	215.872	25.235	.000	.040
COB * INVOLVEMENT	39.955	1	39.955	4.671	.031	.008
Error	5192.539	607	8.554			
Total	31608.000	611				
Corrected Total	5578.304	610				

a. R Squared = .069 (Adjusted R Squared = .065)

Figure 29 plots the marginal means for COB and involvement in purchase intention now. Purchase intention now is higher for COB ($M=7.47$) in comparison with PP ($M=6.39$) type of search when involvement is high. And it is smaller ($M=5.61$) than PP ($M=5.65$) when involvement is low.

Figure 29 Estimated marginal means for purchase intention now - COB and involvement



As the interaction of COB and involvement is statistically significant ($p=0.031$), it is necessary to verify how COB means are dispersed in the Involvement condition. When analyzing the contrasts on COB, it is possible to verify that the impact of COB on the condition with High involvement is statistically significant $F(1,607)=12.772$, $p<0.0001$, but it is not statistically significant in low involvement condition $F(1,607)=0.009$, $p=0.922$. Table 55 presents the details of this contrast analysis.

Table 57 Contrast analysis of COB on involvement - purchase intention now

INVOLVEMENT		Sum of Squares	df	Mean Square	F	Sig.
Low	Contrast	.081	1	.081	.009	.922
	Error	5192.539	607	8.554		
High	Contrast	109.259	1	109.259	12.772	.000
	Error	5192.539	607	8.554		

Each F tests the simple effects of COB within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

It is important to also verify the means for involvement in each of the COB conditions. It is possible to verify that the impact of involvement on the COB condition is statistically significant $F(1,607)=22.059$, $p<0.0001$, and it is also statistically significant on PP condition $F(1,607)=4.935$, $p=0.027$. Table 56 presents the details of this contrast analysis. Table 56 presents detailed information of this contrast analysis.

Table 58 Contrast analysis of involvement on COB - purchase intention now

COB		Sum of Squares	df	Mean Square	F	Sig.
PP	Contrast	42.219	1	42.219	4.935	.027
	Error	5192.539	607	8.554		
COB	Contrast	188.705	1	188.705	22.059	.000
	Error	5192.539	607	8.554		

Each F tests the simple effects of INVOLVEMENT within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

A two-way between-groups analysis was conducted to explore the impact of COB and involvement on purchase intention future. The interaction of COB and involvement was statistically significant on purchase intention now $F(1,607)= 5.504$, $p=0.019$. The effect was small (partial eta squared = 0.009). The main effect of COB was also statistically significant $F(1,607)= 7.049$, $p=0.008$. The effect was small (partial eta squared = 0.008). And the main effect for involvement $F(1,607) = 28.903$, $p<0.0001$. The effect size was medium to large (partial eta squared = 0.045). Table 57 lists the results of the test of between-subjects effect for purchase intention future.

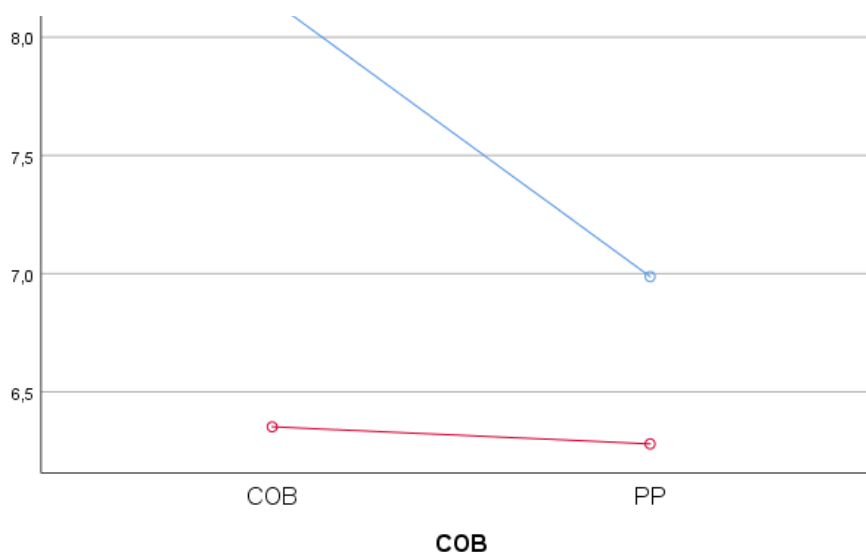
Table 59 Test of between subjects effect for purchase intention future

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	397.252 ^a	3	132.417	19.088	.000	.086
Intercept	24556.777	1	24556.777	3539.895	.000	.854
COB	48.898	1	48.898	7.049	.008	.011
INVOLVEMENT	200.505	1	200.505	28.903	.000	.045
COB * INVOLVEMENT	38.180	1	38.180	5.504	.019	.009
Error	4210.849	607	6.937			
Total	36150.000	611				
Corrected Total	4608.101	610				

a. R Squared = .086 (Adjusted R Squared = .082)

Figure 30 plots the marginal means for COB and involvement in purchase intention now. Purchase intention now is higher for COB ($M=8.52$) in comparison with PP ($M=7.52$) type of search when involvement is high. And it is smaller ($M=6.99$) than PP ($M=7.21$) when involvement is low.

Figure 30 Estimated marginal means for purchase intention future



As the interaction of COB and involvement is statistically significant ($p=0.019$), it is necessary to verify how COB means are dispersed in the Involvement condition. When analyzing the contrasts on COB, it is possible to verify that the impact of COB on the condition with High involvement is statistically significant $F(1,607)=18.422$, $p<0.0001$, but it is not statistically significant in Low involvement condition $F(1,607)=0.036$, $p=0.849$. Table 58 presents the details of this contrast analysis.

Table 60 Contrast analysis of COB in involvement - purchase intention future

INVOLVEMENT		Sum of Squares	df	Mean Square	F	Sig.
Low	Contrast	.251	1	.251	.036	.849
	Error	4210.849	607	6.937		
High	Contrast	127.795	1	127.795	18.422	.000
	Error	4210.849	607	6.937		

Each F tests the simple effects of COB within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

It is important to also verify the means for involvement in each of the COB conditions. It is possible to verify that the impact of involvement on the COB condition is statistically significant $F(1,607)=25.483$, $p<0.0001$, and it is also statistically significant on PP condition $F(1,607)=5.531$, $p=0.019$. Table 56 presents the details of this contrast analysis. Table 59 presents detailed information of this contrast analysis.

Table 61 Contrast analysis for involvement on COB purchase intention future

COB		Sum of Squares	df	Mean Square	F	Sig.
PP	Contrast	38.372	1	38.372	5.531	.019
	Error	4210.849	607	6.937		
COB	Contrast	176.783	1	176.783	25.483	.000
	Error	4210.849	607	6.937		

Each F tests the simple effects of INVOLVEMENT within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

There is a main effect of COB on both purchase intention now ($p=0.046$) and purchase intention future ($p=0.008$), a main effect of involvement on purchase intention now ($p<0.0001$) and purchase intention future ($p<0.0001$). There is a statistically significant interaction of COB and involvement on purchase intention now ($p=0.031$). This interaction is a statistically significant interaction of involvement in COB condition ($p<0.0001$) and also in PP condition ($p=0.027$), and it is a statistically significant of COB in high involvement ($p<0.0001$) but not in low involvement ($p=0.922$). There is a statistically significant interaction of COB and involvement on purchase intention future ($p=0.019$). This interaction is a statistically significant interaction of involvement in COB condition ($p<0.0001$) and also in PP condition ($p=0.019$), and it is a statistically significant of COB in high involvement ($p<0.0001$) but not in low involvement ($p=0.849$).

4.7.3. Other Dependent Variables

A two-way between-groups analysis was conducted to explore the impact of COB and involvement on change in product interest. Change in product interest was assessed using a direct question, related to how respondents perceived their interest for a product has changed. The interaction of COB and involvement was statistically significant on change in product interest $F(1,607)= 10.367$, $p=0.001$. The effect was small (partial eta squared = 0.017). The main effect of COB was also statistically significant $F(1,607)=4.254$, $p=0.040$. The effect was small (partial eta squared = 0.007). And the main effect for involvement $F(1,607) = 23.434$,

$p < 0.0001$. The effect size was medium (partial eta squared = 0.037). Table 60 lists the results of the test of between-subjects effect for change in product interest.

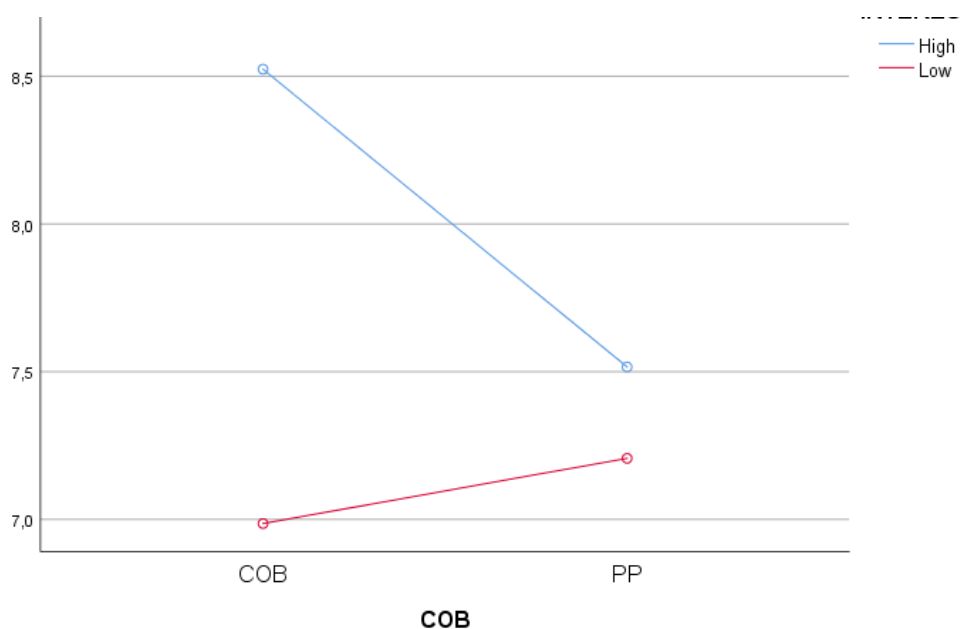
Table 62 Test of between-subjects effects for change in product interest

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	233.680 ^a	3	77.893	16.809	.000	.077
Intercept	29096.127	1	29096.127	6278.676	.000	.912
COB	19.714	1	19.714	4.254	.040	.007
INVOLVEMENT	108.594	1	108.594	23.434	.000	.037
COB * INVOLVEMENT	48.040	1	48.040	10.367	.001	.017
Error	2812.910	607	4.634			
Total	39865.000	611				
Corrected Total	3046.589	610				

a. R Squared = .077 (Adjusted R Squared = .072)

Figure 31 plots the marginal means for COB and involvement on change in product interest. Change in product interest is higher for COB ($M=8.52$) in comparison with PP ($M=7.52$) type of search when involvement is high. And it is smaller ($M=6.99$) than PP ($M=7.51$) when involvement is low.

Figure 31 Estimated marginal means for change in product interest



In the experiment, the time respondents allocated to the browsing activity is measured, and there is a direct question asking them how much time they think they have spent in this activity. The difference of perception is, then, a dependent variable that was observed and analyzed and has statistically significant results to report.

A two-way between-groups analysis was conducted to explore the impact of COB and involvement on the difference of time perception, that it the estimated time for browsing activity and effective time spent. The interaction of COB and involvement was not statistically significant on change in product interest $F(1,607) = 0.032$, $p=0.859$. The main effect of COB was statistically significant $F(1,607) = 34.781$, $p<0.0001$. The effect was medium to large (partial eta squared = 0.057). And the main effect for involvement was not statistically significant $F(1,607) = 1.371$, $p=0.242$. Table 61 lists the results of the test of between-subjects effect for change in product interest.

Table 63 Test of between-subjects effect for difference in time perception of browsing activity

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	169.196 ^a	3	56.399	16.126	.000	.074
Intercept	769.547	1	769.547	220.037	.000	.267
COB	121.643	1	121.643	34.781	.000	.054
INVOLVEMENT	4.795	1	4.795	1.371	.242	.002
COB * INVOLVEMENT	.111	1	.111	.032	.859	.000
Error	2112.400	604	3.497			
Total	3167.004	608				
Corrected Total	2281.595	607				

a. R Squared = .074 (Adjusted R Squared = .070)

4.8.Discussion

The results found in this experiment were related to hypotheses 1, 2, 5, and 5a. There is a positive statistically significant main effect of COB on product knowledge ($p=0.014$), H1 is supported.

There is also a positive statistically significant main effect of COB on purchase intention now ($p=0.046$) and on purchase intention future ($p=0.008$), H2 is supported.

There is a statistically significant interaction of COB and involvement on product knowledge ($p=0.002$). This interaction is a statistically significant of COB in high involvement ($p<0.0001$) but not in low involvement condition ($p=0.703$). H5 is supported.

There is a statistically significant interaction of COB and involvement on purchase intention now ($p=0.031$). This interaction is a statistically significant of COB in high involvement ($p<0.0001$) but not in low involvement ($p=0.992$). There is a statistically significant interaction of COB and involvement on purchase intention now ($p=0.019$). This interaction is a statistically significant of COB in high involvement ($p<0.0001$) but not in low involvement ($p=0.849$). H5a is supported.

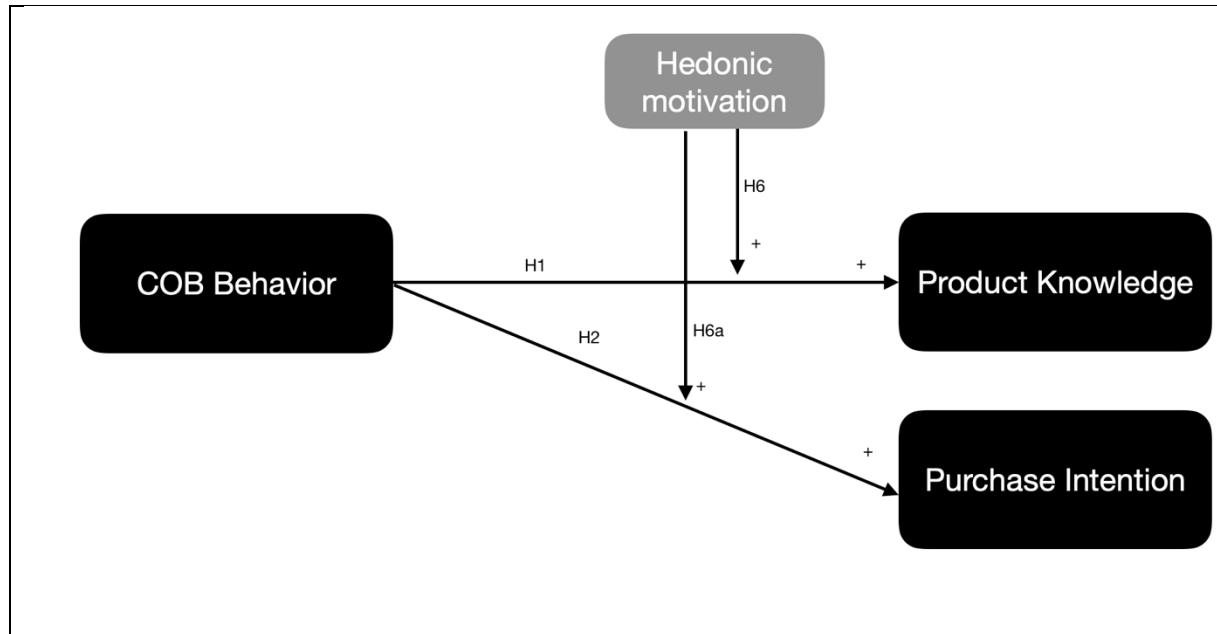
In addition to the dependent variables product knowledge and purchase intention, it was also possible to find statistically significant impact on two other variables: change in product knowledge and difference of perception in time spent browsing. Change in product interest is higher for COB than for PP type of search when involvement is high, suggesting that product interest positive variation occurred more in COB than in PP only for products that consumers are interested in browsing for.

5. Experiment 3 : hedonic and utilitarian motives impacts on COB

5.1. Overview of the experiment

The objective of experiment 3 is to verify if there is an effect of COB behavior on dependent variables Product Knowledge (PK) and Purchase Intention (PI) in comparison with the Prepurchase behavior, where consumers are interested not in browsing, but in comparing options to make a better buying decision (Engel & Roger, 1978), performing a more direct buying type of search (Moe, 2003a). The objective of this experiment is to test if COB behavior impacts positively consumers PK and PI, testing hypotheses 1 and 2. As mentioned in the literature review of this paper, hedonic type of search hypothetically mediates the impact of COB behavior on the dependent variables. This experiment also aims to test hypotheses 6, and 6a, related to the positive impact of hedonic browsing on the impact of COB on PK and PI. This is a 2 (COB/Prepurchase) x 2 (hedonic/utilitarian) experiment design. Figure 32 illustrates the hypotheses tested in this experiment.

Figure 32 Hypothesis tested on Study 3



As it is difficult to draw the line between searching and buying (Bloch et al., 1986; Rowley, 2001), the manipulation used in this study aims to make participants perform these two different types of search in the same website. As this experiment does not treat product involvement, only one type of product was chosen. In experiment 2 in consumer goods category, ranked first in the product interest pretest. Books is also relatively easy to manipulate for hedonic and utilitarian search types, so the product chosen for this experiment is book.

The manipulation in this experiment, however, is more subtle than in experiment 2. In COB manipulation, participants are asked to browse in a bookstore website, looking for one book to give as a gift to a friend, and then the link to access the website is provided. In PP manipulation, the same website is used, but instead of instructing respondents to look for one book, respondents are instructed to look for 2 specific book titles and choose which one they would prefer to buy. In this experiment, instead of asking respondent to click on links that open directly the book titles to be analyzed, the link takes them to the same landing page of COB condition, where they would have to use search tools to find the titles they need to compare in

order to complete the activity. This manipulation mimics the process of comparing books when consumers are undecided between two titles.

To manipulate hedonic and utilitarian, instruction differed on the reasons to choose a book title: in the hedonic condition, respondents are asked to think about a book their friend would like to read in their vacations, while in the utilitarian conditions, respondents are instructed to choose a book title that would be useful to their friend career or work-related projects. In PP conditions, the titles that were suggested as options to choose from were novels for hedonic condition, and business-related books for utilitarian condition.

The main dependent variables are product knowledge and purchase intention (as they are part of the hypotheses tested). 9 additional emotional responses to browsing activity, selected from the dependent variables studies in chapter 3, are also tested. 5 of them with positive valence: Happiness, Hope, Joy, Optimism, and Excitement, and 4 of them with negative valence: Irritation, Frustration, Sadness, and Boredom. As it is expected that product interest changes during COB experience, one dependent variable was included to assess this item. Also, as it was discussed in chapter 3, serendipity finding is a positive outcome from COB, so it was also included as a possible dependent variable in the study.

Ten possible covariates were included in design of the experiment, demographics: age, gender, income, and online behavior, personality traits: compulsiveness, impulsiveness, discussed in chapter 2, related to the activity: change in product interest, browsing time, three dimensions of flow, serendipity scale and interest in the activity performed.

5.2.Method and Procedures

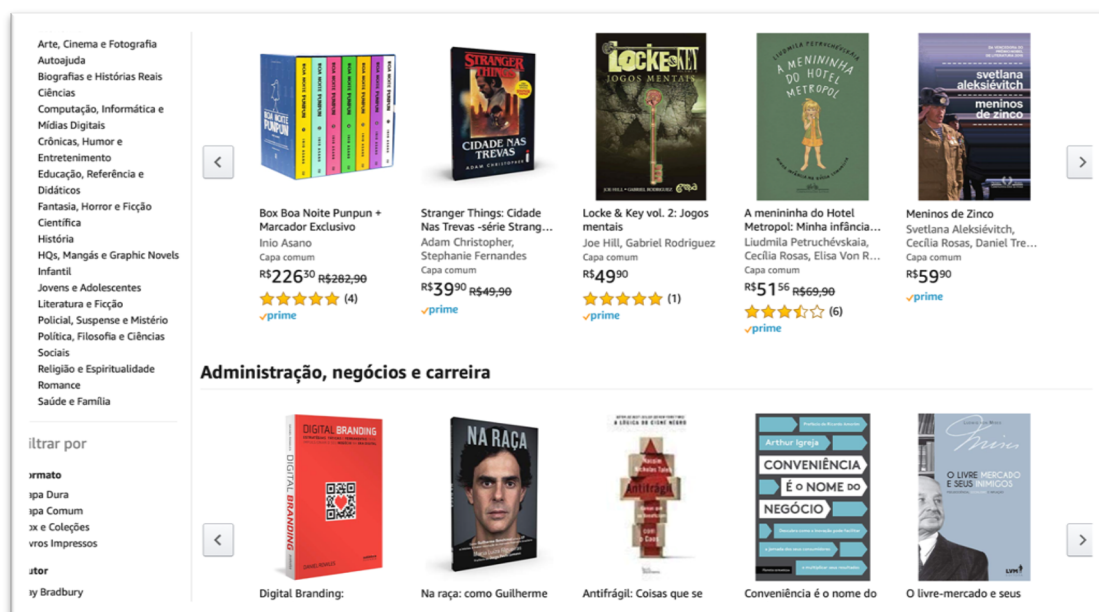
Participants were randomly assigned to one of the four conditions in the experiment. Participants were recruited from Toluna consumer panel in Brazil. Table 62 presents the instructions participants received in each experiment condition. **Text in bold** refers to COB manipulation, and underlined text refer to hedonic/utilitarian manipulation.

Table 62 Manipulation texts for experiment 3

Type of search	Search type	Instructions / Manipulation
COB	Hedonic	Think of a relative or friend who works in technology and enjoys reading. Now visit the website below and choose a book that you would like to give as a gift for him / her to <u>read on their next vacation</u> .
COB	Utilitarian	Think of a relative or friend who works in technology and enjoys reading. Now visit the website below and choose a book that you would like to give as a gift for him / her <u>that would be useful in their career or work-related projects</u> .
PP	Hedonic	Think of a relative or friend who works in technology and enjoys reading. Now visit the website below and search for the books "The Testaments" and "The Richest Man In Babylon" . Compare the two books and indicate which one you would like to give as a gift for him / her <u>to read on their next vacation</u>
PP	Utilitarian	Think of a relative or friend who works in technology and enjoys reading. Now visit the website below and search for the books "Canvas Business Model" and "Scum" . Compare the two books and indicate which one you would like to give as a gift for him / her <u>to that would be useful in their career or work-related projects</u> .

After manipulation, participants then clicked on the link to visit the website. Amazon bookstore was chosen as destination because it offers a large variety of products, and also offer landing pages that incentives consumers to browse. Participants in all four conditions were directed to the same landing page: www.shorturl.at/ceioI that is a page with book titles suggestion for the month. Figure 33 is a snapshot of this land page.

Figure 33 Landing page of website used in experiment 3



5.3.Measures

Dependent variable Product Knowledge was measured using subjective product knowledge scale (Park & Moon, 2003) as it addresses directly the subjective product knowledge perception consumers have. Purchase intention was measured with a direct question: “How likely are you to buy a sneaker that you selected during your search on the sneaker website?” with a 7-points Likert scale. All 9 emotional responses to browsing were measured with a direct question: “As you spent some time on the website that sells sneakers, to what extent did you experience the following.” Then the nine emotions listed as dependent variables appeared in a table with a 7-points Likert scale.

Change in product interest was measured using a direct question: “After spending some time earlier on the website that sells sneakers, how do you feel your interest for sneakers has changed?”, followed by a 10-points scale where 0 is “reduced”, 5 is “did not change” and 10 is “increased”.

Covariates obsessive and compulsive and impulsiveness were measured using these two dimensions of Ridgway et al., (2008b) proposed scale for compulsiveness assessment. Serendipity was also measured with a serendipity scale adapted for online environments (McCay-Peet & Toms, 2011). Interest in the activity was measured using 4 items scale (M.

Moorman et al., 2002), product involvement was measuring using 4 items scale from importance dimension of involvement proposed by Bauer, Sauer, & Becker (2006), and enjoyment of the activity was measured using autotelic dimension from Flow scale (Payne et al., 2011). Product interest was assessed as a direct question: “What is your level of interest in the type of book you searched for in the previous activity?”.

5.4. Manipulation and Attention Check

To check for manipulation for purchase intention, it was included a direct question: “Finally, as you were in the bookstore website, you felt like you were mostly” and two options were presented: “Browsing freely in the website”(COB) or “Looking for previously defined books”(PP). Manipulation was also checked with a direct sentence: “to what extent did you experience the following: sense of exploration and discovery” (COB) or “focused on a goal” (PP).

To check for manipulation for hedonic/utilitarian, one direct question was included: “To what extent do you think the book you chose in the previous activity is” than a 10-points scale is presented where 0 is “useful” and 10 is “fun”.

One attention question was included with two items to be responded. In a similar format of the way the other questions were presented in the questionnaire, the attention check was one of the last questions to be asked, with a 7-points Likert scale. The question was clearly identified as “attention check”: “The questions below are to **check your attention** when responding to this questionnaire. Please select the option defined in the sentences below. If you fail to do so, we will assume that you are not paying attention and will have to discard all of your answers.” and then 2 questions asked them to choose specific responses in the Likert scale: “Please select the disagree option” and “Please select the somewhat agree option”. The objective of this question was to actually filter respondents that were paying attention in the survey. I chose to include 2 questions to also filter respondents that choose the same option in Likert scale type of questions.

5.5.Pretest

Pretest had 136 participants, from Toluna consumer panel in Brazil. 52.2% were male, 33.8% with 31 to 40 years old, and 30.9% 21 to 30 years old, 23.5% with an annual household income between R\$ 25k to R\$ 50k.

There was an issue with condition COB hedonic: after collecting responses for the pretest it was identified an issue in Qualtrics that prevented participants in being allocated to this condition. Table 63 presents detailed demographic information for participants in the pretest.

Table 63 Demographic information of participants in pretest experiment 3

	PP UTIL	PP HED	COB UTIL	COB HED	TOTAL	%
Total	46	45	45		136	
MALE	27	23	21		71	52.2%
FEMALE	19	22	24		65	47.8%
AGE						
<21	3	5	4		12	8.8%
21 - 30	18	12	12		42	30.9%
31-40	14	15	17		46	33.8%
41-50	8	8	8		24	17.6%
51-60	3	2	3		8	5.9%
60+	0	3	1		4	2.9%
INCOME					0	
<25k	13	11	6		30	22.1%
25K<50K	7	11	14		32	23.5%
50K<75k	7	6	9		22	16.2%
75k<100K	7	7	6		20	14.7%
100K<125K	3	4	4		11	8.1%
>125K	9	6	6		21	15.4%

5.6.Demographics of Participants

Data was collected with Toluna consumer panel in Brazil. 709 participants completed the questionnaire. 2 were incomplete, 196 failed the attention check (38.3%), with a total of 511 valid responses (72.1%). The problem with the condition COB Hedonic in pretest was corrected, and all four conditions presented a similar number of participants.

Participants were mostly female (68.3%), with 21 to 30 years old (35.6%) or 31 to 40 years old (31.5%), with an annual household income between R\$ 25,000 to R\$ 50,000(30.7%) or less than R\$ 25,000 (28.8%). Table 64 presents detailed demographic information of participants in the experiment.

Table 64 Demographic information participants experiment 3

	PP UTIL	PP HED	COB UTIL	COB HED	TOTAL	%
GENDER	128	137	144	102	511	
MALE	32	46	48	36	162	31,7%
FEMALE	96	91	96	66	349	68,3%
AGE						
<21	7	8	9	8	32	6,3%
21 - 30	49	50	46	37	182	35,6%
31-40	45	40	41	35	161	31,5%
41-50	15	27	33	10	85	16,6%
51-60	10	6	9	8	33	6,5%
60+	2	6	6	4	18	3,5%
INCOME						
<25k	38	33	46	30	147	28,8%
25K<50K	34	42	49	32	157	30,7%
50K<75k	20	18	16	12	66	12,9%
75k<100K	17	18	14	10	59	11,5%
100K<125K	7	18	6	10	41	8,0%
>125K	12	8	13	8	41	8,0%

5.7.Results

The method used to analyze the results was two-way between groups analysis of variance (also known as two-way ANOVA) because it allow the verification of possible interactions amongst the 2 independent variables in this study (intention: low/high, and motivation: incidental/intentional), and at the same time compare means between the groups in each of the independent variable to check if there are significant differences in the scenarios explored in the experiment.

To test for possible covariates, ANCOVA method was used. Prior to use ANCOVA however, it is important to test for each possible covariate to verify if the possible covariate is influenced by the treatment (independent variables of the study). One-way ANOVA test was run for each possible covariate to verify if these covariates are significantly influenced by the independent variables (purchase intention and motivation) of the study. If a significant value is found, the covariate cannot be used in ANCOVA as it is also influenced by the treatment (Valle & Rebelo, 2002). Table 65 presents the significance level of one-way ANOVA for each possible covariate in the study. Results show that only the covariate “informed product interest” cannot be used in ANCOVA study as it is also affected by the treatment in the study.

Table 65 - Analysis of covariates prior to running ANCOVA

Covariates	Lavene's test (p value)
Flow Dim 1	0.592
Flow Dim 2	0.558
Flow Dim 3	0.073
Product Knowledge	0.053
Serendipity	0.565
Interest in the Activity	0.125
Obsessive Compulsive scale	0.995
Impulsive Scale	0.868
Age	0.668
Gender	0.446
Income	0.588
Informed Product Interest	<0.0001

It is also important to test the reliability of the scales used in the study. Table 66 presents the Alfa Cronbach for each scale in the study. All of them present a good reliability with Alpha Cronbach over 0.8, except for Interest in the activity scale (Alpha Cronbach = 0.66). Therefore, Interest in the activity is not used in this study.

Table 66 - Reliability of scales used in experiment 3

Scale	Items	Alpha Cronbach
Flow Dim 1	3	0.86
Flow Dim 2	3	0.83
Flow Dim 3	3	0.9
Product Knowledge	3	0.8
Serendipity	4	0.83
Interest in the Activity	4	0.66
Obsessive Compulsive scale	3	0.83
Impulsive Scale	3	0.82
Interest in the Activity New	3	0.77

Results are presented in the following manner: for the two main dependent variables: product knowledge and purchase intention, the main result of Two-way ANOVA is presented, with the visual graphic of the model. All possible covariates are analyzed and only results that change the main effect of the independent variables and/or their interaction to statistically significant are reported.

5.7.1. Product Knowledge

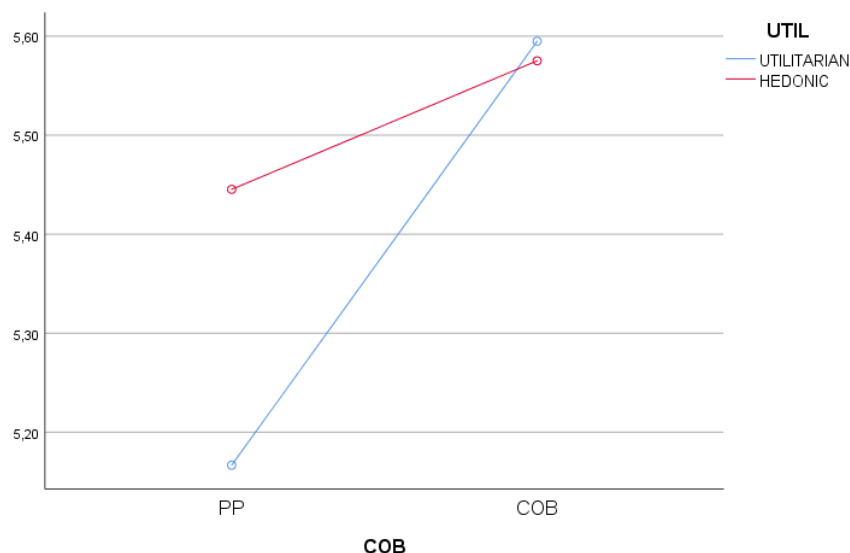
A two-way between-groups analysis was conducted to explore the impact of COB and Hedonic/utilitarian on product knowledge. The interaction of COB and hedonic is not statistically significant on product knowledge $F(1,507) = 1.722$, $p = 0.190$. The main effect of COB is statistically significant $F(1,507) = 6.028$, $p = 0.014$. The effect is small (partial eta squared = 0.012). The main effect for hedonic/utilitarian $F(1,507) = 1.297$, $p = 0.255$. Table 67 lists the results of the test of between-subjects effect for product knowledge.

Table 67 - Test of Between-subjects effects on product knowledge - experiment 3

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected model	14.879 ^a	3	4.960	3.058	.028	.018
Intercept	14891.814	1	14891.814	9181.132	.000	.948
COB	9.778	1	9.778	6.028	.014	.012
UTIL	2.103	1	2.103	1.297	.255	.003
COB * UTIL	2.794	1	2.794	1.722	.190	.003
Error	822.355	507	1.622			
Total	15979.444	511				
Corrected total	837.234	510				

Figure 34 plots the marginal means for COB and hedonic/utilitarian on product knowledge. Product knowledge is higher for COB ($M=5.60$) in comparison with PP ($M=5.16$) for utilitarian search. And it is also higher ($M=5.57$) than PP ($M=5.49$) for hedonic search.

Figure 34 Estimated marginal means for product knowledge



When I analyzed the effect of possible covariates in product knowledge, only flow dimension 1 showed a relevant effect in product knowledge. Flow dimension 1 is related to MAA – merging actions and awareness. There is a significant effect of COB on product knowledge after controlling for flow $F(1,506) = 7.856$, $p=0.005$, with partial ETA squared 0.015. Table 68 presents the results of the test of between-subjects effect for product knowledge with flow as covariate.

Table 68 - Test of between-subjects effect for product knowledge with flow as covariate

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected model	36.581 ^a	4	9.145	5.780	.000	.044
Intercept	1764.435	1	1764.435	1115.095	.000	.688
FLOW1SC	21.702	1	21.702	13.715	.000	.026
COB	12.430	1	12.430	7.856	.005	.015
UTIL	2.619	1	2.619	1.655	.199	.003
COB * UTIL	1.726	1	1.726	1.091	.297	.002
Error	800.653	506	1.582			
Total	15979.444	511				
Corrected total	837.234	510				

There is a main effect of COB on product knowledge ($p=0.014$), and the impact of COB is higher than PP both in utilitarian and hedonic types of search, therefore H1 is supported. The interaction of hedonic search on the positive impact of COB in product knowledge, however, is not supported, as the interaction is not statistically significant ($p=0.19$).

5.7.2. Purchase intention

Purchase intention was measured with two direct questions: intention to purchase in the next days (purchase intention now), and intention to purchase in the next months (purchase intention future). When analyzing the results of these 2 dependent variables, a very similar pattern of results was found in these variables, and for that reason, results are reported for only one of these variables: purchase intention now.

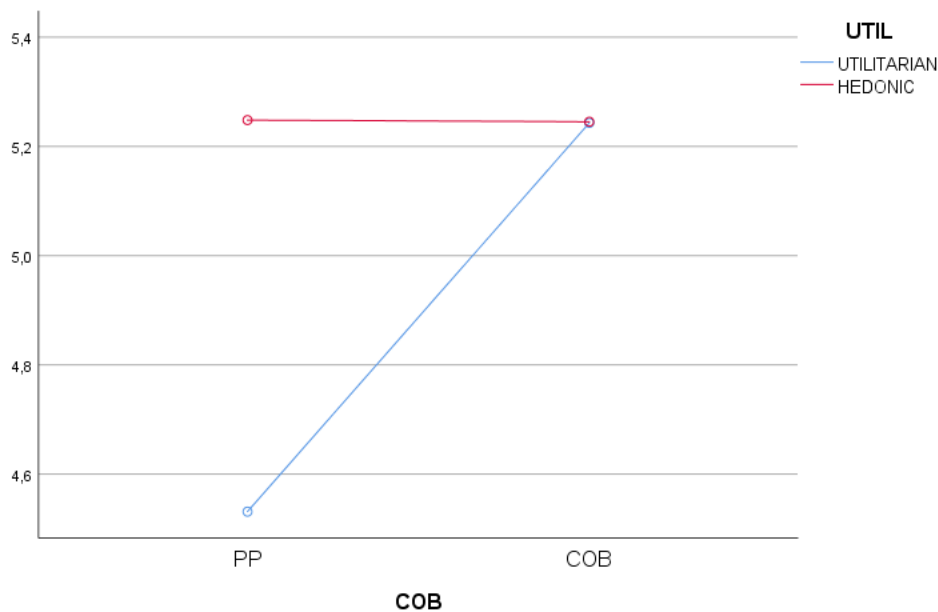
A two-way between-groups analysis was conducted to explore the impact of COB and Hedonic/utilitarian on purchase intention. The interaction of COB and hedonic/utilitarian is statistically significant on purchase intention now $F(1,507)= 5.448$, $p=0.02$. The effect is small (partial eta squared = 0.011). The main effect of COB is statistically significant $F(1,507)= 5.354$, $p=0.021$. The effect is small (partial eta squared = 0.010). The main effect for hedonic/utilitarian is statistically significant $F(1,507) = 5.510$, $p=0.019$. The effect was small (partial eta squared = 0.011). Table 69 lists the results of the test of between-subjects effect for purchase intention.

Table 69 Test of between-subjects effect for purchase intention now

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected model	48.935	3	16.312	5.540	.001	.032
Intercept	12893.063	1	12893.063	4378.866	.000	.896
COB	15.766	1	15.766	5.354	.021	.010
UTIL	16.224	1	16.224	5.510	.019	.011
COB * UTIL	16.041	1	16.041	5.448	.020	.011
Error	1492.803	507	2.944			
Total	14659.000	511				
Corrected total	1541.738	510				

Figure 35 plots the marginal means for COB and hedonic/utilitarian on purchase intention. Purchase intention is almost the same for COB ($M=5.22$) in comparison with PP ($M=5.23$) for hedonic search. And it is higher ($M=5.22$) than PP ($M=4.54$) for utilitarian search. This suggests that when the search is hedonic, purchase intention is high regardless of the type of search consumer is performing (COB or PP), and when the type of search is utilitarian, purchase intention is higher for COB type of search.

Figure 35 Estimated marginal means for purchase intention



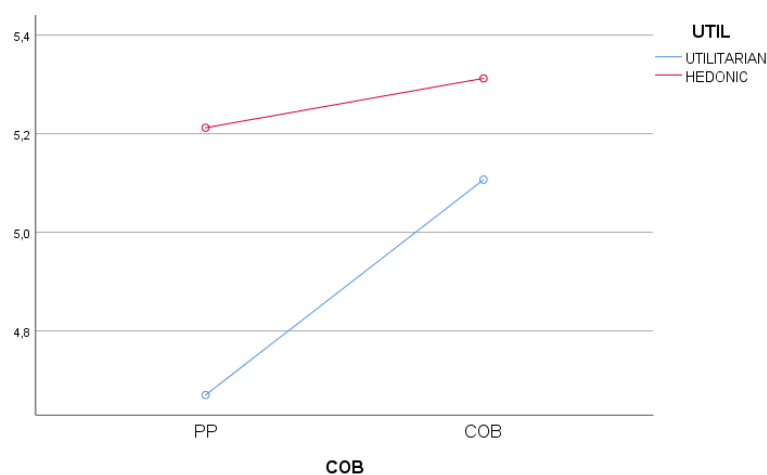
When I analyzed the effect of possible covariates in purchase intention, only serendipity scale presented a relevant effect on purchase intention. Serendipity scale refers to how consumers perceive if they find unexpected, positive things during their browsing or searching behavior. What is interesting about these results is that it enhances the effect for hedonic/utilitarian and weakens the effect of the interaction, to a non-significant relationship. There is a significant effect of hedonic on purchase intention after controlling for serendipity $F(1,506) = 7.867, p=0.005$, with partial η^2 0.015. Table 70 presents the results of the test of between-subjects effect for product knowledge with flow as covariate.

Table 70 Test of between-subjects effect on purchase intention, controlling for serendipity

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected model	413.603 ^a	4	103.401	46.378	.000	.268
Intercept	55.724	1	55.724	24.994	.000	.047
SERENDSC	364.668	1	364.668	163.564	.000	.244
COB	9.029	1	9.029	4.050	.045	.008
UTIL	17.540	1	17.540	7.867	.005	.015
COB * UTIL	3.514	1	3.514	1.576	.210	.003
Error	1128.135	506	2.230			
Total	14659.000	511				
Corrected total	1541.738	510				

a. R Squared = .268 (Adjusted R Square = .262)

Figure 36 plots the marginal means for COB and hedonic/utilitarian on purchase intention. Purchase intention is higher for COB ($M=5.31$) in comparison with PP ($M=5.21$) for hedonic search. And it is also higher ($M=5.13$) than PP ($M=4.53$) for utilitarian search. Controlling for serendipity increased the difference in the means for PP and COB that were almost the same in the hedonic condition.

Figure 36 Estimated marginal means for purchase intention, controlling for serendipity

As covariáveis que aparecem no modelo são avaliadas nos valores a seguir: SERENDSC = 5,3390

5.7.3. Other dependent variables

It was possible to verify interesting results for other dependent variables. COB presents a statistically significant effect for joy, hope, happiness, optimism and excitement.

A two-way between-groups analysis was conducted to explore the impact of COB and Hedonic/utilitarian on joy. The interaction of COB and hedonic/utilitarian is not statistically significant on joy $F(1,507) = 1.640$, $p = 0.201$. The main effect of COB is statistically significant $F(1,507) = 12.152$, $p = 0.001$. The effect is small (partial eta squared = 0.023). The main effect for hedonic/utilitarian is not statistically significant $F(1,507) = 2.135$, $p = 0.145$. Table 71 lists the results of the test of between-subjects effect for joy.

Table 71 Test of between-subjects effect for joy

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected model	44.383 ^a	3	14.794	5.297	.001	.030
Intercept	13208.508	1	13208.508	4729.002	.000	.903
COB	33.942	1	33.942	12.152	.001	.023
UTIL	5.964	1	5.964	2.135	.145	.004
COB * UTIL	4.579	1	4.579	1.640	.201	.003
Error	1416.094	507	2.793			
Total	14863.000	511				
Corrected total	1460.477	510				

A two-way between-groups analysis was conducted to explore the impact of COB and Hedonic/utilitarian on optimism. The interaction of COB and hedonic/utilitarian is not statistically significant on optimism $F(1,507) = 1.384$, $p = 0.240$. The main effect of COB is statistically significant $F(1,507) = 9.205$, $p = 0.003$. The effect is small (partial eta squared = 0.018). The main effect for hedonic/utilitarian is not statistically significant $F(1,507) = 1.868$, $p = 0.172$. Table 72 lists the results of the test of between-subjects effect for optimism.

Table 72 Test of between-subjects effect on optimism

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected model	32.282 ^a	3	10.761	4.139	.006	.024
Intercept	14566.366	1	14566.366	5603.019	.000	.917
COB	23.931	1	23.931	9.205	.003	.018
UTIL	4.857	1	4.857	1.868	.172	.004
COB * UTIL	3.599	1	3.599	1.384	.240	.003
Error	1318.066	507	2.600			
Total	16139.000	511				
Corrected total	1350.348	510				

A two-way between-groups analysis was conducted to explore the impact of COB and Hedonic/utilitarian on excitement. The interaction of COB and hedonic/utilitarian is not statistically significant on excitement $F(1,507) = 0.138$, $p = 0.711$. The main effect of COB is statistically significant $F(1,507) = 9.898$, $p = 0.002$. The effect is small (partial eta squared = 0.019). The main effect for hedonic/utilitarian is not statistically significant $F(1,507) = 0.319$, $p = 0.572$. Table 73 lists the results of the test of between-subjects effect for excitement.

Table 73 Test of between-subjects effects on excitement

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected model	35.043 ^a	3	11.681	3.444	.017	.020
Intercept	11971.076	1	11971.076	3529.322	.000	.874
COB	33.575	1	33.575	9.898	.002	.019
UTIL	1.083	1	1.083	.319	.572	.001
COB * UTIL	.467	1	.467	.138	.711	.000
Error	1719.689	507	3.392			
Total	13888.000	511				
Corrected total	1754.732	510				

A two-way between-groups analysis was conducted to explore the impact of COB and Hedonic/utilitarian on happiness. The interaction of COB and hedonic/utilitarian is not statistically significant on happiness $F(1,507) = 3.607$, $p = 0.058$. The main effect of COB is statistically significant $F(1,507) = 11.335$, $p = 0.001$. The effect is small (partial eta squared = 0.022). The main effect for hedonic/utilitarian is not statistically significant $F(1,507) = 0.974$, $p = 0.324$. Table 74 lists the results of the test of between-subjects effect for happiness.

Table 74 Test of between-subjects effect on happiness

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected model	45.805	3	15.268	5.501	.001	.032
Intercept	12771.779	1	12771.779	4601.388	.000	.901
COB	31.461	1	31.461	11.335	.001	.022
UTIL	2.705	1	2.705	.974	.324	.002
COB * UTIL	10.012	1	10.012	3.607	.058	.007
Error	1407.247	507	2.776			
Total	14449.000	511				
Corrected total	1453.053	510				

A two-way between-groups analysis was conducted to explore the impact of COB and Hedonic/utilitarian on hope. The interaction of COB and hedonic/utilitarian is not statistically significant on hope $F(1,507) = 3.238$, $p = 0.073$. The main effect of COB is statistically significant $F(1,507) = 5.519$, $p = 0.019$. The effect is small (partial eta squared = 0.011). The

main effect for hedonic/utilitarian is not statistically significant $F(1,507) = 0.963$, $p=0.327$. Table 75 lists the results of the test of between-subjects effect for hope.

Table 75 Test of between-subjects effects on hope

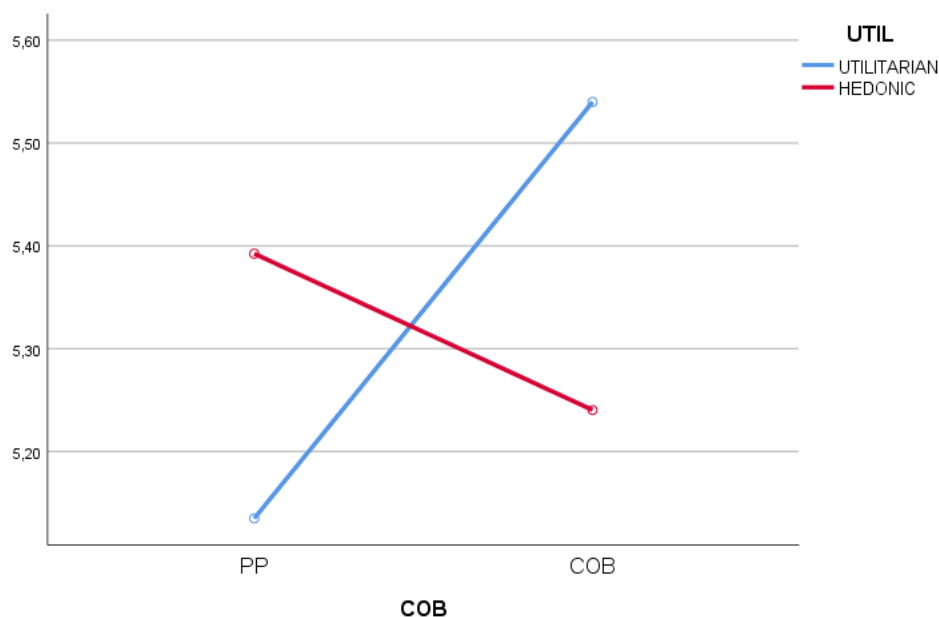
	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected model	34.244 ^a	3	11.415	3.370	.018	.020
Intercept	12124.134	1	12124.134	3579.758	.000	.876
COB	18.693	1	18.693	5.519	.019	.011
UTIL	3.261	1	3.261	.963	.327	.002
COB * UTIL	10.967	1	10.967	3.238	.073	.006
Error	1717.137	507	3.387			
Total	14100.000	511				
Corrected total	1751.382	510				

When I analyzed the effects on possible dependent variables, serendipity findings presented an interesting result. It does not present a significant relationship for either COB or hedonic/utilitarian, but presents a statistically significant interaction of these independent variables on serendipity findings. There is a significant effect of the interaction of COB and hedonic/utilitarian on serendipity findings $F(1,507) = 6.242$, $p=0.013$, with partial ETA squared 0.012. There is no significant effect for COB on serendipity $F(1,507)= 1.287$, $p=0.257$, neither for hedonic/utilitarian on serendipity $F(1,507) = 0.36$, $p=0.850$. Table 76 presents the results of the test of between-subjects effect for product knowledge with flow as covariate.

Table 76 Test of between-subjects effect on serendipity

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected model	12.538 ^a	3	4.179	2.676	.047	.016
Intercept	14249.718	1	14249.718	9124.452	.000	.947
COB	2.009	1	2.009	1.287	.257	.003
UTIL	.056	1	.056	.036	.850	.000
COB * UTIL	9.748	1	9.748	6.242	.013	.012
Error	791.785	507	1.562			
Total	15370.563	511				
Corrected total	804.324	510				

As there is a statistically significant on the interaction, it is important to visualize how this interaction is plotted in the graphic representation of estimated marginal means. Figure 37 presents how COB and hedonic/utilitarian effect on serendipity findings: when the search is hedonic, serendipity findings is higher in PP ($M=5.39$) than in COB ($M=5.27$), but the effect is reversed when the search is utilitarian: serendipity findings is higher in COB ($M=5.57$) than in PP ($M=5.12$).

Figure 37 Estimated marginal means for serendipity

A two-way between-groups analysis was conducted to explore the impact of COB and Hedonic/utilitarian on change in product interest. The interaction of COB and hedonic/utilitarian is not statistically significant on change in product interest $F(1,507) = 0.691$, $p = 0.406$. The main effect of COB is statistically significant $F(1,507) = 6.060$ $p = 0.0194$. The effect is small (partial eta squared = 0.012). The main effect for hedonic/utilitarian is statistically significant $F(1,507) = 5.089$, $p = 0.025$. The effect is small (partial eta squared = 0.010). Table 77 lists the results of the test of between-subjects effect for change in product interest.

Table 77 Test of between-subjects effect on change in product interest

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected model	17.567 ^a	3	5.856	3.769	.011	.022
Intercept	15956.277	1	15956.277	10269.056	.000	.953
COB	9.416	1	9.416	6.060	.014	.012
UTIL	7.907	1	7.907	5.089	.025	.010
COB * UTIL	1.073	1	1.073	.691	.406	.001
Error	787.787	507	1.554			
Total	16992.000	511				
Corrected total	805.354	510				

5.7.4. Manipulation check

The manipulation for COB worked as intended. The mean for PP (M=1.53) is higher than COB (M=1.32) and this difference is statistically significant $z(1,509) = 25.172$, $p < 0.0001$. Table 78 presents the mean for PP and COB in the manipulation check question (response 1 was COB and 2 was PP).

Table 78 Manipulation check for COB experiment 3

	N	Mean	Error	Error	Intervalo de confiança de 95% para média	
					lower bound	upper bound
PP	265	1.53	.500	.031	1.47	1.59
COB	246	1.32	.466	.030	1.26	1.38
Total	511	1.43	.495	.022	1.39	1.47

The manipulation for hedonic/utilitarian did not work as intended. The mean was higher for hedonic (M=3.03) than utilitarian (M=2.77) but this difference is not statistically significant $z(1,509) = 1.786$, $p = 0.182$. Table 79 presents the mean for PP and COB in the manipulation check question (response 1 was COB and 2 was PP).

Table 79 Manipulation check for hedonic/utilitarian experiment 3

	N	Mean	Error	Error	Intervalo de confiança de 95% para média	
					Lower Bound	Upper bound
UTILITARIAN	272	2.77	2.276	.138	2.50	3.04
HEDONIC	239	3.03	2.192	.142	2.75	3.31
Total	511	2.89	2.239	.099	2.70	3.09

5.8. Discussion

There is a main effect of COB on product knowledge ($p = 0.014$), and the impact of COB is higher than PP both in utilitarian and hedonic types of search, therefore H1 is supported. The interaction of hedonic search on the positive impact of COB in product knowledge, however, is not supported, as the interaction is not statistically significant ($p = 0.19$). Therefore, H6 is not supported. None of the tested covariates on the interaction were found to be statistically significant. The impact of COB on product knowledge is enhanced when controlling for flow

– consumers that engage in flow due to merging actions and awareness (e.g. clicking on things automatically, without awareness).

There is a main effect of COB on purchase intention that is statistically significant ($p=0.021$), therefore H2 is supported. a main effect of hedonic/utilitarian on purchase intention that is statistically significant (0.019), and the interaction of COB and hedonic/utilitarian on purchase intention is also statistically significant ($p=0.02$). Therefore 6a is supported.

Serendipity findings impacts the interaction of COB and hedonic/utilitarian on purchase intention, reducing the effect to a non-significant one. In this case, this effect enhances COB when the search is hedonic and reduces both PP and COB when the search is utilitarian. This effect suggests that serendipity has a relevant role in defining purchase intention and that this impact is stronger in hedonic types of search, which is consistent with findings about serendipity in information search literature – hedonic tends to lead to more serendipity findings. (Agarwal, 2015).

From the nine emotional responses included as dependent variables in this experiment, 5 of them, all of them with a positive valence, presented statistically significant impact of COB on them. COB increases the feelings of joy ($p=0.001$), happiness ($p=0.001$), hope($p=0.019$), excitement ($p=0.002$) and optimism ($p=0.003$) on consumers. This suggests that COB is an activity that triggers positive responses in consumers, stimulating their positive perception of the browsing activity. This is consistent with the findings on Chapter 3, where interviewees reported feeling happy, hopeful, and enjoyment of the COB behavior.

Serendipity presented a statistically significant interaction of COB and hedonic/utilitarian: when it is an hedonic search, the impact of serendipity is more present in PP ($M=5.39$) than in COB ($M=5.23$), and when it is an utilitarian search, the impact is more present in COB ($M=5.53$) than in PP ($M=5.12$). This suggests that serendipity findings is more relevant in PP when performing a hedonic search, and more relevant in COB when performing a utilitarian search, which is not usual, as COB is a more hedonic behavior, while PP is more utilitarian. Maybe this can be explained by the fact the serendipity findings has the unexpected in the core of their concept, where people stumble upon them (Case, 2007; McCay-Peet & Toms, 2011).

6. Discussion

The objective of this paper is to analyze and discuss how COB influences consumer behavior and how this concept may have academic and managerial implications for researchers. A set of 10 hypotheses were proposed taking into consideration the impact of COB in two main dependent variables: product knowledge and purchase intention.

Three experiments were conducted to test these hypotheses. Experiment 1 aimed to verify how the different types of search inside COB behavior impacts product knowledge, purchase intention and other variables such as joy and frustration. Two main types of search inside COB behavior are investigated: exploratory type of search, where purchase intention is low, and focused on a goal type of search, where purchase intention is higher. Motivation for browsing may be intentional or incidental (i.e. triggered by ad exposure), this experiment aimed to test how these different types of search interact with motivation for browsing.

The manipulation used in this study is very subtle, through instruction and using respondents' disposition to mentally set their mindset in a specific behavior defined in the instructions. 549 valid responses were collected on Qualtrics consumer panel. Results showed that is non-significant impact on product knowledge, but when covariates are used, some relevant results are noteworthy. Product involvement as a covariate influences the impact of intention on product knowledge to a statistically significant effect ($p=0.023$), suggesting that for products consumers are more involved with, there is a positive statistically significant on product knowledge. In relation to purchase intention, three covariates makes the effect on purchase intention statistically significant. Informed product interest effect on purchase intention on both intention browsing ($p=0.037$) and motivation to browse ($p=0.013$), suggesting that when the interest for a product category has a positive impact on both intention and motivation. Product involvement has an effect on the intention to purchase intention ($p=0.008$).

Besides PK and PI, frustration presented a statistically significant effect of motivation to browsing. Consumers browsing intentionally are more prone to frustration than those who browse incidentally. Joy is another dependent variable with interesting results. The interaction of motivation and intention is statistically significant when the covariate impulsiveness is added ($p=0.035$) or when the interest in the activity is added ($p=0.022$). These findings suggest that

when consumers intentionally engage in COB, they are more likely to feel frustration than those who engage in COB incidentally. Impulsiveness is a relevant covariate for the effect on Joy, likely because impulsive shopping may be fun (Gallagher, Watt, Weaver, & Murphy, 2017; Wolfinbarger & Gilly, 2001).

From experiment 1 I was able to investigate how different types of search inside COB and motivations for COB have different implication for consumer behavior. In this experiment, the manipulation was very subtle, aiming to simulate a real browsing experience. Experiment 2 aimed to verify if COB, in comparison with Prepurchase (Engel & Roger, 1978; Moe, 2003b) behavior. As product involvement was a relevant covariate in experiment 1, it was chosen as an independent variable in experiment 2.

Manipulation in this experiment was more direct, asking participants to either browse (COB) or compare 2 different products (PP). 611 participants in this experiment. Results showed effect of COB ($p=0.014$) and product involvement ($p<0.0001$) on product knowledge and purchase intention (COB, $p=0.046$ and PP, $p<0.0001$). As the interactions were statistically significant, I was able to verify that the impact of COB in products with high involvement has a statistically significant ($p<0.0001$) and High involvement in COB and PP behavior are also statistically significant. This means that both product knowledge and purchase intention are positively influenced by COB. High involvement also played a decisive role, suggesting that involvement is a key factor to analyze the impact of COB on consumer behavior.

Experiment 3 compares COB and PP with hedonic and utilitarian search type. Hedonic and utilitarian were manipulated with the reason to browse for a product. Also, in this experiment, manipulation tried to simulate real life online behavior. Instead of giving links with products to compare in PP conditions, participants just had the name of the book they had to look for in the website. 511 participants were recruited from Toluna consumer panel. There is a main effect of COB on product knowledge ($p=0.014$), and the impact of COB is higher than PP both in utilitarian and hedonic types of search. There is a main effect of COB on purchase intention that is statistically significant ($p=0.021$). A main effect of hedonic/utilitarian on purchase intention that is statistically significant (0.019), and the interaction of COB and hedonic/utilitarian on purchase intention is also statistically significant ($p=0.02$).

From the 9 emotional responses included as dependent variables in this experiment, 5 of them, all of them with a positive valence, presented statistically significant impact of COB on them. COB increases the feelings of joy ($p=0.001$), happiness ($p=0.001$), hope ($p=0.019$), excitement ($p=0.002$) and optimism ($p=0.003$) on consumers. This suggests that COB is an activity that triggers positive responses in consumers, stimulating their positive perception of the browsing activity, suggesting that COB indeed has a fun dimension, as conceptualized in browsing (Bloch & Richins, 1983a; P. Huang et al., 2009).

Table 80 lists the ten hypotheses from this study. H1, H2, H5, H5a are supported, H3, H3a, H4a are partially supported and H4, H6, and H6a are not supported. In the case of H6a the predicted effect occurred in a statistically significant way but in the other direction: it was expected that hedonic browsing would positively influence the impact of COB on purchase intention, but the results showed this effect for utilitarian reasons.

Table 80 List of hypotheses and results from experiments

Hypothesis	Experiment	Results
H1: COB impacts positively on subjective product knowledge	2 and 3	Experiment 2 supported ($p=0.014$) Experiment 3 supported ($p=0.014$)
H2: COB impacts positively on purchase intention	2 and 3	Experiment 2 supported ($p=0.046$) Experiment 3 supported ($p=0.021$)
H3: Consumers in exploratory (versus goal-directed) type of search in COB the impact of COB is higher on product knowledge.	1	Partially supported
H3a: Consumers in goal-directed (versus exploratory) type of search in COB have a higher purchase intention.	1	Partially supported
H4: When consumers engage in intentional COB (versus incidental COB) behavior, the impact on product knowledge is higher.	1	Not supported
H4a: When consumers engage in intentional COB (versus incidental COB) behavior, the impact in purchase intention is higher.	1	Partially supported
H5: The impact of COB on product knowledge is higher when consumers present a high-involvement with the product (versus low-involvement).	2	Supported ($p=0.002$)
H5a: The impact of COB on purchase intention is higher when consumers present a high-involvement with the product (versus low-involvement).	2	Supported ($p=0.019$)
H6: When consumers engage in COB for hedonic reason (versus utilitarian), the impact on product knowledge is higher.	3	Not supported
H6a: When consumers engage in COB for hedonic reason (versus utilitarian), the impact on purchase intention is higher.	3	Supported ($p=0.019$)

The objective of this paper was to explore academic and managerial implications of COB behavior for consumer behavior researches and practitioners. The range of significant results found, surpassing the expected implications for product knowledge and including the effects of covariates such as product involvement, serendipity findings, flow, amongst others showcased the complexity of COB as a promising concept in consumer behavior. Significant results of the impact of COB in different types of emotions (joy, happiness, hope, frustration) is particularly intriguing and demonstrate the potential of exploration for COB, a concept that is exploratory in nature.

7. Limitations and Future Research

This paper tried to assess how COB impacts consumer behavior by conducting experiments where respondents were instructed to browse online. This kind of behavior is not easy to simulate in experiments, especially in ones conducted online because one of the key characteristics of COB is that it happens organically, throughout the daily activities that consumers perform everyday: consumers browse online for several reasons and in different occasions during the day: between tasks, using it as a way to distract their mind, during their coffee break, when in traffic, during commute, unintentionally when they are seeing their Instagram and Facebook feeds, or intentionally in rituals they create to accommodate a space to experience the fun side of COB in their lives.

One limitation of this study is that the experiments were conducted online, with the use of consumer panels. In this type of experiment, it is hard to expect that consumers browse for a long period. Ideally a presential experiment with a large time dedicated to browsing would allow to capture in a more satisfactory way the dynamics of browsing behavior. Also, as experiments were conducted online, it was not possible to verify the actual online behavior participants had when they were in the experiment. If the experiment was conducted in a place where it was possible to control the environment, it would be possible to record the websites visited during the COB activity and therefore better understanding the COB behavior. This is a suggestion for future research.

Also, one more suggestion is to explore qualitatively the different paths consumers take in browsing throughout their lives. Inserting a tracking device in a consumer personal computer and read the tracked history for 3 or 4 days, and then analyze the tracked navigation with them, trying to understand the moments where they engage in COB and why, would potentially help to understand better the complex dynamic of this behavior.

CHAPTER 5 - GENERAL DISCUSSION

This first article of this dissertation focused on analyzing how compulsiveness is being discussed in marketing and consumer behavior literature throughout the Consumer Journey framework. As it was seen, the Prepurchase stage and Postpurchase stages are the ones in need of further research about compulsiveness. From the proposed research agenda for this first theoretical paper, I realized that online browsing was not investigated as a possible compulsive behavior. When I explored this topic, I had a serendipity finding: online browsing behavior was not conceptualized as a distinct consumer behavior in literature, as previous studies has used it as a way to create and predict online shopping, through the analysis of clickstreams (Goel et al., 2012; Kumar & Tomkins, 2010; Sismeiro & Bucklin, 2004), or part of the online shopping behavior (H. Y. Kim & Kim, 2008; Rowley, 2001). Gilly & Wolfinbarger (2011) and Moe, (2003b) published compelling papers about the different types of search in online browsing and its difference to offline browsing behavior (Bloch & Richins, 1983a) but their work did not conceptually defined online browsing as a distinct behavior. I decided to try to fill this gap in literature in this dissertation with papers 2 and 3 of this dissertation: In paper 2 I propose a conceptual definition for COB and in paper 3 I explored the impacts of COB in consumer behavior.

There are anecdotal evidences that COB is a relevant behavior in marketing. Companies like Westwing, Nuji, and even global retailers like Zara, are investing into designing online consumer experience that incentivizes longer browsing, mimicking offline browsing without the hazards of dealing with traffic, annoying salespeople, and limited working hours. However, little is known about the potential gains and perils of such online “looking around” without a particular purchase intention. This research conceptually defines and investigates such Consumer Online Browsing (COB) as a distinct online behavior with a purpose of better understanding its antecedents and unique outcomes with implications for both consumers and brands.

During the exploratory interviews, it was possible to verify the extent of COB behavior. It goes from an incidental browsing activity, triggered by digital ads, that consumers engage in for some minutes, to planned browsing routines in consumers everyday lives. The impacts

reported by interviewees are mostly positive: they enjoy the experience, and do not regret the time they spend browsing, even considering that often they lose track of time and spend more time than expected. Therefore, frustration due to time spent browsing is not so common. Also, they report finding new products and brands through COB and incorporated them in their consumption habits. These types of serendipity findings occur constantly in COB, which makes them evaluated as a positive behavior, dedicating more time to do it. COB is also mentioned as inspirational – to improve their current work – and also as aspirational – to improve consumption patterns. Interviewees reported spontaneously that through COB they became more aware of their consumption behavior, which provokes concerns with sustainability in them. From these interviews, I was able to propose 20 testable dependent variables, to empirically distinguish COB from offline browsing. I was able to show that COB is indeed distinct from offline browsing in some characteristics: COB leads to more product knowledge, consumers engage in COB to avoid unwanted tasks, often lose track of time and feel reluctant to return to work. During COB consumers do not feel pressure to buy, do not engage in impulsive buying or buy unplanned things. And they do not feel embarrassed to browse. These are characteristics consumers attribute to offline browsing and are distinct from their perception of COB.

In paper 3 I tested a set of 10 hypotheses related to the impact of COB in two main dependent variables: product knowledge and purchase intention. Three experiments were conducted to test these hypotheses. Experiment 1 aimed to verify how exploratory and goal-directed types of search inside COB behavior impacts product knowledge, purchase intention and other variables such as joy and frustration. Results showed that product involvement influences the impact of intention on product knowledge, suggesting that for products consumers are more involved with, there is a positive statistically significant on product knowledge. In relation to purchase intention, product involvement and product interest are covariates that influence the impact of COB.

Consumers browsing intentionally are more prone to frustration than those who browse incidentally. Joy is another dependent variable with interesting results. These findings suggest that when consumers intentionally engage in COB, they are more likely to feel frustrated than those who engage in COB incidentally. Impulsiveness is a relevant covariate for the effect on Joy, likely because impulsive shopping may be fun (Gallagher et al., 2017; Wolfinbarger & Gilly, 2001).

In experiment 2, results showed effect of COB and product involvement on product knowledge and purchase intention. Product knowledge and purchase intention are positively influenced by COB. High involvement also played a decisive role, suggesting that involvement is a key factor to analyze the impact of COB on consumer behavior.

In experiment 3 it was observed a main effect of COB on product knowledge and the impact of COB is higher than Prepurchase both in utilitarian and hedonic types of search. Omer compelling finding from experiment 3 is that from the 9 emotional responses included as dependent variables in the experiment, 5 of them - all of them with a positive valence - presented statistically significant impact of COB on them. COB increases the feelings of joy, happiness, hope, excitement, and optimism on consumers. This suggests that COB is an activity that triggers positive responses in consumers, stimulating their positive perception of the browsing activity, suggesting that COB indeed has a fun dimension, as conceptualized in browsing (Bloch & Richins, 1983a; Huang et al., 2009). This is also consistent with the finding in the exploratory interviews in paper 2.

From the results of these empirical studies it is possible to verify that COB is indeed a complex phenomenon that deserves further research in consumer behavior literature. By adopting a perspective that put consumers' perspective in the center of the concept for online browsing, and shifting from the focus that current studies give on analyzing and predicting behavior through clickstreams in websites, it is possible to investigate the motivations, expectations, and outcomes that online browsing offers to consumer behavior, and deepens our knowledge about this complex concept. Several relevant findings were found in the three experiments in this paper. Table 81 lists all statistically significant findings in this paper:

Table 81 - Findings from Paper 3

Finding	p value	Hypotheses	Experiment
Intention on PK, when controlling for product involvement	0.023	Partially support H3	1
Intention on PI, when controlling for product interest	0.037	Partially support H3a	1
Motivation on PI, when controlling for product interest	0.013	Partially support H4a	1
Motivation on PI, when controlling for interest in the activity	0.020	Partially support H4a	1
Motivation on Frustration (it is higher when COB is intentional)	0.021		1
COB impacts positively on PK	0.014	Supports H1	2
Involvement impacts positively on PK	<0.0001	Supports H5	2
Interaction of COB and involvement on PK (when product interest is HIGH COB impacts on PK is higher than PP and the reverse when product interest is LOW)	0.002		2
COB impacts positively on PI	0.046	Supports H2	2
Involvement impacts positively on PI	<0.0001	Supports H5a	2
Interaction of COB and involvement on PI (when product interest is HIGH COB impacts on PI is higher than PP and the reverse when product interest is LOW)	0.031		2
COB impacts positively on Change in Product Interest	0.04		2
Involvement impacts positively on Change in Product Interest	<0.0001		2
Interaction of COB and involvement on Change in Product Interest (when product interest is HIGH COB impacts is higher than PP and the reverse when product interest is LOW)	0.001		2
COB impacts positively on PK	0.014	Supports H1	3
COB impacts positively on PI	0.021	Supports H2	3
Hedonic impacts positively on PI	0.019	Supports H6a	3
Interaction of COB and hedonic on PI (when type of search is HEDONIC the impact of COB and PP on PI is the same, but when it is utilitarian the impact of COB is higher).	0.02		3
COB impacts positively on Joy	0.001		3
COB impacts positively on Happiness	0.001		3
COB impacts positively on Excitement	0.002		3
COB impacts positively on Optimism	0.003		3
COB impacts positively on Hope	0.019		3
COB impacts positively on Change in Product Interest	0.014		3
Hedonic impacts positively on Change in Product Interest	0.025		3

REFERENCES

- Agarwal, N. K. (2015). Towards a definition of serendipity in information behaviour. *Information Research*, 20(3).
- Alba, J. W. (1983). The Effects of Product Knowledge on the Comprehension, Retention, and Evaluation of Product Information. *Advances in Consumer Research*, 10(1), 577–580.
- Anderl, E., Schumann, J. H., & Kunz, W. (2016). Helping Firms Reduce Complexity in Multichannel Online Data: A New Taxonomy-Based Approach for Customer Journeys. *Journal of Retailing*, 92(2), 185–203. <https://doi.org/10.1016/j.jretai.2015.10.001>
- Aranda, J. H., & Baig, S. (2018). Toward" JOMO" the joy of missing out and the freedom of disconnecting. *Proceedings of the 20th International Conference on Human-Computer Interaction with Mobile Devices and Services*, 1–8.
- Arsel, Z. (2017). Asking questions with reflexive focus: Atutorial on designing and conducting interviews. *Journal of Consumer Research*, 44(4), 939–948.
- Bardhi, F., & Arnould, E. J. (2005). Thrift shopping: Combining utilitarian thrift and hedonic treat benefits. *Journal of Consumer Behaviour*, 4(4), 223–233.
- Bates, M. J. (2007). What is browsing - Really? A model drawing from behavioural science research. *Information Research*, 12(4).
- Batra, R., & Keller, K. L. (2016). Integrating Marketing Communications: New Findings, New Lessons, and New Ideas. *Journal of Marketing*, 80(6), 122–145.
- Bauer, H. H., Sauer, N. E., & Becker, C. (2006). Investigating the relationship between product involvement and consumer decision-making styles. *Journal of Consumer Behaviour*, Vol. 5, pp. 342–354. <https://doi.org/10.1002/cb.185>
- Bawa, K., & Shoemaker, R. W. (1987). The Coupon-Prone Consumer: Some Findings Based on Purchase Behavior Across Product Classes. *Journal of Marketing*, 51(4), 99–110.
- Bettman, J. R., & Park, C. W. (1980). Effects of Prior Knowledge and Experience and Phase of the Choice Process on Consumer Decision Processes: A Protocol Analysis. *Journal of Consumer Research*, 7(3), 234. <https://doi.org/10.1086/208812>
- Björneborn, L. (2008). Serendipity dimensions and users' information behaviour in the physical library interface. *Information Research*, 13(4), paper 370.
- Bloch, Peter H., Richins, M. (1983). Shopping Without Purchase : An Investigation of Consumer Browsing Behavior. *Advances in Consumer Research*, 10, 389–393.
- Bloch, P. H., Sherrell, D. L., & Ridgway, N. M. (1986). Consumer Search: An Extended Framework. *Journal of Consumer Research*, 13(1), 119. <https://doi.org/10.1086/209052>
- Bloch, P., Sherrell, D. L., & Ridgway, N. M. (1986). Consumer Search: An Extended Framework. *Journal of Consumer Research*, 13(1), 119–126.
- Boateng, H., & Okoe, A. F. (2015). Consumers' attitude towards social media advertising and their behavioural response. *Journal of Research in Interactive Marketing*.
- Brown, M., Pope, N., & Voges, K. (2003). Buying or browsing? *European Journal of Marketing*, 37(11/12), 1666–1684. <https://doi.org/10.1108/03090560310495401>
- Brubaker, J. R., Ananny, M., & Crawford, K. (2016). Departing glances: A sociotechnical account of 'leaving' Grindr. *New Media & Society*, 18(3), 373–390.
- Brucks, M. (1985). The Effects of Product Class Knowledge on Information Search Behavior. *Journal of Consumer Research*. <https://doi.org/10.1086/209031>
- Canniford, R. (2011). A Typology of Consumption Communities. *Research in Consumer Behavior*, 13, 57–75. [https://doi.org/10.1108/S0885-2111\(2011\)0000013014](https://doi.org/10.1108/S0885-2111(2011)0000013014)
- Case, D. (2007). *Looking for Information A Survey of Research on Information Seeking, Needs, and Behavior Second Edition* (2nd ed.). London: Elsevier.
- Chang, S.-J. S. J., & Rice, R. E. (1993). Browsing: A multidimensional framework. *Annual Reviews of Information Science and Technology*, Vol. 28, pp. 231–276.

- Cheung, C. M. K., Zhu, L., Kwong, T., Chan, G. W. W., & Limayem, M. (2003). eTransformation Online Consumer Behavior : A Review and Agenda for Future Research. *International Journal of Electronic Commerce*, 4pp(Fishbein 1967), 194–218.
- Choo, A., Wei, C., Detlor, ,Turnbull, D. (1999). *Information Seeking on the Web-An Integrated Model of Browsing and Searching*, 1999 ASIS Annual Meeting Contributed Paper
- Court, D., Elzinga, D., Mulder, S., & Vetvik, O. J. J. (2009). The consumer decision journey. *McKinsey Quarterly*, 3(3), 96-107. 12p. 1 Color Photograph.
- Creswell, J. W. (2007). *Qualitative Inquiry & Research Design Choosing Among Five Approaches* (2nd ed.). <https://doi.org/10.1016/j.aenj.2008.02.005>
- Crook, C. (2014). *The joy of missing out: Finding balance in a wired world*. New Society Publishers.
- Csikszentmihalyi, M. (2000). *Beyond boredom and anxiety*. Jossey-Bass.
- Csikszentmihalyi, M. (2009). *Flow: The psychology of optimal experience (Nachdr.)*. New York: Harper [and] Row.
- Dahl, D. W., Argo, J. J., & Morales, A. C. (2012). Social Information in the Retail Environment: The Importance of Consumption Alignment, Referent Identity, and Self-Esteem. *Journal of Consumer Research*, 38(5), 860–871. <https://doi.org/10.1086/660918>
- Dames, H., Hirschfeld, G. Sackmann, T. Thielsch, M. T. (2019). Searching vs . Browsing — The Influence of Consumers ’ Goal Directedness on Website Evaluations. *Interacting with Computers*, 31(1).
- Dawson, S., & Richins, M. L. (1992). A Consumer Values Orientation for Materialism and Its Measurement : Scale Development and Validation. *Journal of Consumer Research*, 19(December), 303–316.
- De Cannière, M. H., De Pelsmacker, P., & Geuens, M. (2009). Relationship Quality and the Theory of Planned Behavior models of behavioral intentions and purchase behavior. *Journal of Business Research*, 62(1), 82–92.
- Dickinger, A., & Kleinjnen, M. (2008). Coupons Going Wireless: Determinants Of Consumer Intentions To Redeem Mobile Coupons. *Journal of Interactive Marketing*, 22(3), 23–39.
- Donthu, N., & Garcia, A. (1999). The internet shopper. *Journal of Advertising Research*, 39(3), 52.
- Edwards, E. A. (1993). Development of a new scale for measuring compulsive buying behavior. *Journal of Financial Counseling and Planning*, 4(313), 67–85.
- Engel, J. F., & Roger, D. (1978). Blackwell, and David T. Kollat, Consumer Behavior. *Hinsdale, IL: Dryden Press*, 6, 215.
- Faber, R. J., & O’Guinn, T. C. (1992). A Clinical Screener for Compulsive Buying. *Journal of Consumer Research*, 19(3), 459. <https://doi.org/10.1086/209315>
- Foxall, G. (2005). *Understanding consumer choice*. Springer.
- Gallagher, C. E., Watt, M. C., Weaver, A. D., & Murphy, K. A. (2017). “I fear, therefore, I shop!” exploring anxiety sensitivity in relation to compulsive buying. *Personality and Individual Differences*, 104, 37–42. <https://doi.org/10.1016/j.paid.2016.07.023>
- Ganesh, J., Reynolds, K. E., Luckett, M., & Pomirleanu, N. (2010). Online Shopper Motivations, and e-Store Attributes: An Examination of Online Patronage Behavior and Shopper Typologies. *Journal of Retailing*, 86(1), 106–115.
- García, I. (2007). La compra compulsiva: ¿impulso irresistible o reflejo del sistema de valores personales? *Revista de Psicología Social*, 22(2), 125–136.
- Gilly, M. C., & Wolfinbarger, M. (2011). A comparison of consumer experiences with online and offline shopping. *Consumption Markets & Culture*, 4(2), 187–205.
- Giovannini, S., Xu, Y., & Thomas, J. (2015). Luxury fashion consumption and Generation Y consumers Self, brand consciousness, and consumption motivations. *Journal of Fashion*

- Marketing and Management International Journal of Retail Distribution Management Iss Journal of Service Management Iss*, 19(08), 22–40.
- Goel, S., Hofman, J. M., & Sirer, M. I. (2012). Who does what on the web: A large-scale study of browsing behavior. *6th International AAAI Conference on Weblogs and Social Media*.
- Gupta, S. (2013). A Literature Review of Compulsive Buying—A Marketing Perspective. *Journal of Applied Business and Economics*, 14(1), 43–48.
- Hassouneh, D. (College of A. S. and I. P. P. U., & Brengman, M. (Department of B. F. U. of B. (2015). Retailing in Social Virtual Worlds : Developing a Typology of Virtual Store Atmospherics. *Journal of Electronic Commerce Research*, 16(3), 218–241.
- Hauser, J. R., Urban, G. L., Liberali, G., & Braun, M. (2009). WEbsite morphing. *Marketing Science*, 28(2), 202–223. <https://doi.org/10.1287/mksc.1080.0459>
- Haws, K. L., Bearden, W. O., & Nenkov, G. Y. (2012). Consumer spending self-control effectiveness and outcome elaboration prompts. *Journal of the Academy of Marketing Science*, 40(5), 695–710. <https://doi.org/10.1007/s11747-011-0249-2>
- Hider, P. (2006). Search goal revision in models of information retrieval. *Journal of Information Science*. <https://doi.org/10.1177/0165551506065811>
- Hirschman, E. C. (1992). The Consciousness of Addiction: Toward a General Theory of Compulsive Consumption. *Journal of Consumer Research*, 19(9), 155–179.
- Hjärland, B. (2011). The importance of theories of knowledge: Browsing as an example. *Journal of the American Society for Information Science and Technology*, Vol. 62, pp. 594–603. <https://doi.org/10.1002/asi.21480>
- Hoffman, D. L., & Novak, T. P. (1996). Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations. *Journal of Marketing*, 60(3), 50–68.
- Hoffman, D. L., & Novak, T. P. (2009). Flow Online: Lessons Learned and Future Prospects. *Journal of Interactive Marketing*, 23(1), 23–34.
- Holbrook, M., & Hirschman, E. (1982). The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun. *Journal of Consumer Research*, 9(2), 132.
- Hong James Thong, W. Y., & YAN TAM WEIYIN HONG (2005). The Effects of Information Format and Shopping Task on Consumers' Online Shopping Behavior: A Cognitive Fit Perspective. *International Journal of Human-computer interaction, and cotnputer ethics* (Vol. 1).
- Hormes, J. M., Kearns, B., & Timko, C. A. (2014). Craving Facebook? Behavioral addiction to online social networking and its association with emotion regulation deficits. *Addiction*. <https://doi.org/10.1111/add.12713>
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288.
- Hsu, Y. Y., Lin, R. J., Kuo, T. Y., Su, Y. Y., Uang, R. H., & Cheng, H. C. (2006). Mechanical properties measurement of nanowires anisotropic conductive film by nanoindentation technique. In *2006 NSTI Nanotechnology Conference and Trade Show - NSTI Nanotech 2006 Technical Proceedings* (Vol. 1).
- Huang, L. T. (2016). Flow and social capital theory in online impulse buying. *Journal of Business Research*. <https://doi.org/10.1016/j.jbusres.2015.12.042>
- Huang, P., Lurie, N. H., & Mitra, S. (2009). Searching for experience on the web: An empirical examination of consumer behavior for search and experience goods. *Journal of Marketing*, 73(2), 55–69. <https://doi.org/10.1509/jmkg.73.2.55>
- Ieva, M., De Canio, F., & Ziliani, C. (2016). Daily deal shoppers: What drives social couponing? *Journal of Retailing and Consumer Services*, (July 2016), 1–5.
- Islam, T., Wei, J., Sheikh, Z., Hameed, Z., & Azam, R. I. (2017). Determinants of compulsive buying behavior among young adults: The mediating role of materialism. *Journal of*

- Adolescence*, 61(July 2016), 117–130. <https://doi.org/10.1016/j.adolescence.2017.10.004>
- Janiszewski, C. (1998). The Influence of Display Characteristics on Visual Exploratory Search Behavior. *Journal of Consumer Research*, 25(3), 290–301.
- Jansen, B. J., & Schuster, S. (2011). Bidding on the buying funnel for sponsored search and keyword advertising. *Journal of Electronic Commerce Research*, 12(1), 1.
- Jayawardhena, C., & Wright, L. T. (2009). An empirical investigation into e-shopping excitement: antecedents and effects. *European Journal of Marketing*, 43(9/10), 1171–1187. <https://doi.org/10.1108/03090560910976429>
- Jenner, M. (2016). Is this TVIV? On Netflix, TVIII and binge-watching. *New Media and Society*, 18(2), 257–273. <https://doi.org/10.1177/1461444814541523>
- Johnson, E. J., Moe, W. W., Fader, P. S., Bellman, S., & Lohse, G. L. (2004). On the Depth and Dynamics of Online Search Behavior. *Management Science*, 50(3), 299–308.
- Kacen, J. J., & Lee, J. A. (2002). The Influence of Culture on Consumer Impulsive Buying Behavior. *Journal of Consumer Psychology*, 12(2), 163–176.
- Kang, H., Hahn, M., & Fortin, D. R. (2006). Effects of Perceived Behavioral Control on the Consumer Usage Intention of E-coupons. *Psychology & Marketing*, 23(10), 841–864.
- Kannan, P. K., & Li, H. Alice (2017). Digital marketing: A framework, review and research agenda. *International Journal of Research in Marketing*, 34(1), 22–45.
- Kesari, B., & Atulkar, S. (2016). Satisfaction of mall shoppers: A study on perceived utilitarian and hedonic shopping values. *Journal of Retailing and Consumer Services*, 31, 22–31. <https://doi.org/10.1016/j.jretconser.2016.03.005>
- Kim, H. Y., & Kim, Y. K. (2008). Shopping enjoyment and store shopping modes: The moderating influence of chronic time pressure. *Journal of Retailing and Consumer Services*, 15(5), 410–419. <https://doi.org/10.1016/j.jretconser.2007.10.003>
- Kim, S., & Eastin, M. S. (2011). Hedonic tendencies and the online consumer: An investigation of the online shopping process. *Journal of Internet Commerce*, 10(1), 68–90. <https://doi.org/10.1080/15332861.2011.558458>
- Kircaburun, K., & Griffiths, M. D. (2018a). Instagram addiction and the Big Five of personality: The mediating role of self-liking. *Journal of Behavioral Addictions*, 7(1), 1–13. <https://doi.org/10.1556/2006.7.2018.15>
- Kircaburun, K., & Griffiths, M. D. (2018b). Instagram addiction and the Big Five of personality: The mediating role of self-liking. *Journal of Behavioral Addictions*.
- Korzaan, M. L. (2003). Going with the flow: Predicting online purchase intentions. *Journal of Computer Information Systems*, 43(4), 25–31.
- Koufaris, M. (2002). Applying the Technology Acceptance Model and flow theory to online Consumer Behavior. *Information Systems Research*.
- Kozinets, R., Patterson, A., & Ashman, R. (2017). Networks of desire: How technology increases our passion to consume. *Journal of Consumer Research*, 43(5), 659–682.
- Kronrod, A., & Danziger, S. (2013). “Wii Will Rock You!” The Use and Effect of Figurative Language in Consumer Reviews of Hedonic and Utilitarian Consumption. *Journal of Consumer Research*, 40(4), 726–739. <https://doi.org/10.1086/671998>
- Kronrod, A., Grinstein, A., & Wathieu, L. (2012). Enjoy! Hedonic Consumption and Compliance with Assertive Messages. *Journal of Consumer Research*, 39(1), 51–61. <https://doi.org/10.1086/661933>
- Kumar, R., & Tomkins, A. (2010). A characterization of online browsing behavior. *Proceedings of the 19th International Conference on World Wide Web*, 561–570.
- Kuss, D. J., & Griffiths, M. D. (2017). Social networking sites and addiction: Ten lessons learned. *International Journal of Environmental Research and Public Health*, 14(3), 311.
- Laing, A., & Royle, J. (2013). Bookselling online: An examination of consumer behaviour patterns. *Publishing Research Quarterly*, 29(2), 110–127.

- Lawrence, L. M., Ciorciari, J., & Kyrios, M. (2014). Relationships that compulsive buying has with addiction, obsessive-compulsiveness, hoarding, and depression. *Comprehensive Psychiatry*. <https://doi.org/10.1016/j.comppsy.2014.03.005>
- Lee, B. K., & Lee, W. N. (2011). The impact of product knowledge on consumer product memory and evaluation in the competitive ad context: The item-specific-relational perspective. *Psychology and Marketing*, Vol. 28, pp. 360–387.
- Lee, S. M., & Chen, L. (2010). The impact of flow on online consumer behavior. *Journal of Computer Information Systems*, 50(4), 1–10.
- Lemon, K. N., & Verhoef, P. C. (2016). Understanding Customer Experience Throughout the Customer Journey. *Journal of Marketing*, 80(6), 69–96.
- Liu, H., Chu, H., Huang, Q., & Chen, X. (2016). Enhancing the flow experience of consumers in China through interpersonal interaction in social commerce. *Computers in Human Behavior*, 58, 306–314. <https://doi.org/10.1016/j.chb.2016.01.012>
- Luna, D., Peracchio, L. A., & De Juan, M. D. (2002). Cross-cultural and cognitive aspects of web site navigation. *Journal of the Academy of Marketing Science*, 30(4), 397–410.
- Lynch, J. G., & Ariely, D. (2000). Wine Online: Search Costs Affect Competition on Price, Quality, and Distribution. *Marketing Science*, 19(1), 83–103.
- Mahnke, R., Benlian, A., & Hess, T. (2015). A grounded theory of online shopping flow. *International Journal of Electronic Commerce*, 19(3), 54–89. <https://doi.org/10.1080/10864415.2015.1000222>
- Manolis, C., Roberts, J. A., & Kashyap, V. (2008). A Critique and Comparison of Two Scales From Fifteen Years of Studying Compulsive Buying '. *Psychological Reports*, 102, 153–165. <https://doi.org/10.2466/pr0.102.1.153-165>
- Manolis, Chris, & Roberts, J. A. (2008). Compulsive buying: Does it matter how it's measured? *Journal of Economic Psychology*, 29(4), 555–576.
- Maraz, A., Griffiths, M. D., & Demetrovics, Z. (2016). The prevalence of compulsive buying : a meta-analysis. *Addiction Review*, 111, 408–419.
- Mathwick, C., & Rigdon, E. (2004). Play, Flow, and the Online Search Experience. *Journal of Consumer Research*, 31(2), 324–332.
- McCay-Peet, L., & Toms, E. (2011). Measuring the dimensions of serendipity in digital environments. *Information Research*, 16(3), 1–6.
- McQuarrie, E. F., & Munson, J. M. (1992). A Revised Product Involvement Inventory. *Advances in Consumer Research*, 19(1985), 108–115.
- Meissner, H., Creswell, J., Klassen, A. C., Plano, V., & Smith, K. C. (2011). Best Practices for Mixed Methods Research in the Health Sciences. *Methods*, 29, 1–39.
- Mikko Villi, Johanna Moisander, and A. J. (2012). Social Curation in Consumer Communities: Consumers As Curators of Online Media Content. *NA-Advances in Consumer Research*, 40, 490–495. <https://doi.org/43008804>
- Moe, W. W. (2003a). Buying, searching, or browsing: Differentiating between online shoppers using in-store navigational clickstream. *Journal of Consumer Psychology*, 13(1–2), 29–39.
- Moe, W. W. (2003b). Buying, Searching, or Browsing: Differentiating Between Online Shoppers Using In-Store Navigational Clickstream. *Journal of Consumer Psychology*, 13(1–2), 29–39. https://doi.org/10.1207/S15327663JCP13-1&2_03
- Montgomery, A. L., Li, S., Srinivasan, K., & Liechty, J. C. (2004). Modeling online browsing and path analysis using clickstream data. *Marketing Science*, 23(4), 579–595.
- Moorman, C. (1995). Organizational Market Information Processes: Cultural Antecedents and New Product Outcomes. *Journal of Marketing Research*, 32(3), 318–335.
- Moorman, M., Neijens, P. C., & Smit, E. G. (2002). The effects of magazine-induced psychological responses and thematic congruence on memory and attitude toward the ad

- in a real-life setting. *Journal of Advertising*, 31(4), 27–40.
- Moorthy, S., Ratchford, B. T., & Talukdar, D. (1997). Consumer Information Search Revisited: Theory and Empirical Analysis. *Journal of Consumer Research*, 23, 263–277.
- Moorthy, S., Ratchford, B. T., & Talukdar, D. (2016). *Consumer Information Search Revisited : Theory and Empirical Analysis*. 23(4), 263–277.
- Morris, J. W., & Powers, D. (2015). Control, curation and musical experience in streaming music services. *Creative Industries Journal*, 8(2), 106–122.
- Mowen, J. C., & Spears, N. (1999). Understanding Compulsive Buying Among College Students: A Hierarchical Approach. *Journal of Consumer Psychology*, 8(4), 407–430.
- Nakamura, J., & Csikszentmihalyi, M. (2005). Concept of Flow.pdf. *Handbook of Positive Psychology*, pp. 89–105.
- Natarajan, R., & Goff, B. G. (1992). Manifestations of compulsiveness in the consumer marketplace domain. *Psychology & Marketing*, 9(1), 31–44.
- Novak, T. P., Hoffman, D. L., & Yung, Y. F. (2000). Measuring the customer experience in online environments: A structural modeling approach. *Marketing Science*, 19(1), 22–42. <https://doi.org/10.1287/mksc.19.1.22.15184>
- Novak, T. P., Huffman, D. L., & Duhachek, A. (2003). The influence of goal-directed and experiential activities on online flow experiences. *Journal of Consumer Psychology*, 13(1–2), 3–16. https://doi.org/10.1207/s15327663jcp13-1&2_01
- O’Guinn, T. C., & Faber, R. J. (1989). Compulsive Buying: A Phenomenological Exploration. *Journal of Consumer Research*, 16(2), 147. <https://doi.org/10.1086/209204>
- Ono, A., Nakamura, A., Okuno, A., & Sumikawa, M. (2012). Consumer Motivations in Browsing Online Stores with Mobile Devices. *International Journal of Electronic Commerce*, 16(4), 153–178. <https://doi.org/10.2753/JEC1086-4415160406>
- Orosz, G., Tóth-Király, I., Bőthe, B., & Melher, D. (2016). Too many swipes for today: The development of the Problematic Tinder Use Scale (PTUS). *Journal of Behavioral Addictions*, 5(3), 518–523.
- Otero-López, J. M., Pol, E. V., Bolaño, C. C., & Mariño, M. J. S. (2011). Materialism, life-satisfaction and addictive buying: Examining the causal relationships. *Personality and Individual Differences*. <https://doi.org/10.1016/j.paid.2010.12.027>
- Otero-López, J. M., & Villardefrancos, E. (2015). Compulsive buying and life aspirations: An analysis of intrinsic and extrinsic goals. *Personality and Individual Differences*, 76, 166–170. <https://doi.org/10.1016/j.paid.2014.12.013>
- Ozkara, B. Y., Ozmen, M., & Kim, J. W. (2016). Exploring the relationship between information satisfaction and flow in the context of consumers’ online search. *Computers in Human Behavior*, 63, 844–859. <https://doi.org/10.1016/j.chb.2016.06.038>
- Ozkara, B. Y., Ozmen, M., & Kim, J. W. (2017). Examining the effect of flow experience on online purchase: A novel approach to the flow theory based on hedonic and utilitarian value. *Journal of Retailing and Consumer Services*, 37(February), 119–131.
- Pace, S. (2004). A grounded theory of the flow experiences of web users. *International Journal of Human Computer Studies*, 60(3), 327–363.
- Palan, K. M., Morrow, P. C., Trapp, A., & Blackburn, V. (2011). Compulsive buying behavior in college students: The mediating role of credit card misuse. *Journal of Marketing Theory and Practice*, 19(1), 81–96.
- Park, C. W., & Moon, B. J. (2003a). The Relationship between Product Involvement and Product Knowledge: Moderating Roles of Product Type and Product Knowledge Type. *Psychology and Marketing*, 20(11), 977–997. <https://doi.org/10.1002/mar.10105>
- Park, E. J., Kim, E. Y., Funches, V. M., & Foxx, W. (2012). Apparel product attributes, web browsing, and e-impulse buying on shopping websites. *Journal of Business Research*.
- Park, Y.-H., & Fader, P. S. (2004). Modeling browsing behavior at multiple websites.

- Marketing Science*, 23(3), 280–303.
- Payne, B. R., Jackson, J. J., Noh, S. R., & Stine-Morrow, E. A. L. (2011). In the Zone: Flow State and Cognition in Older Adults. *Psychology and Aging*, Vol. 26, pp. 738–743.
- Peck, J., & Childers, T. L. (2003). Individual Differences in Haptic Information Processing: The “Need for Touch” Scale. *Journal of Consumer Research*, 30(3), 430–442.
- Peterson, R. A., & Merino, M. C. (2003). Consumer Information Search Behavior and the Internet. *Psychology and Marketing*. <https://doi.org/10.1002/mar.10062>
- Pires, G. D., Stanton, J., & Rita, P. (2006). The internet, consumer empowerment and marketing strategies. *European Journal of Marketing*, 40(9–10), 936–949.
- Procci, K., Singer, A. R., Levy, K. R., & Bowers, C. (2012). Measuring the flow experience of gamers: An evaluation of the DFS-2. *Computers in Human Behavior*, 28(6), 2306–2312. <https://doi.org/10.1016/j.chb.2012.06.039>
- Quester, P., & Lin Lim, A. (2003). Product involvement/brand loyalty: Is there a link? *Journal of Product & Brand Management*, 12(1), 22–38.
- Reeves, R. A., Baker, G. A., & Truluck, C. S. (2012). Celebrity Worship, Materialism, Compulsive Buying, and the Empty Self. *Psychology & Marketing*, 29(9), 674–679.
- Rick, S. I., Pereira, B., & Burson, K. A. (2014). The benefits of retail therapy: Making purchase decisions reduces residual sadness. *Journal of Consumer Psychology*, 24(3), 373–380. <https://doi.org/10.1016/j.jcps.2013.12.004>
- Ridgway, N. M., Kukar-Kinney, M., & Monroe, K. B. (2008). An Expanded Conceptualization and a New Measure of Compulsive Buying. *Journal of Consumer Research*. <https://doi.org/10.1086/591108>
- Ritchie, J., & Spencer, L. (2002). Qualitative data analysis for applied policy research. In *Analyzing qualitative data* (pp. 187–208). Routledge.
- Rook, D. W. (1987). The Buying Impulse. *Journal of Consumer Research*. <https://doi.org/10.1086/209105>
- Rose, S., Clark, M., Samouel, P., & Hair, N. (2012). Online Customer Experience in e-Retailing: An empirical model of Antecedents and Outcomes. *Journal of Retailing*, 88(2), 308–322. <https://doi.org/10.1016/j.jretai.2012.03.001>
- Rose, S., Hair, N., & Clark, M. (2011). Online Customer Experience: A Review of the Business-to-Consumer Online Purchase Context. *International Journal of Management Reviews*, 13(1), 24–39. <https://doi.org/10.1111/j.1468-2370.2010.00280.x>
- Rowley, J. (2001). ‘Window’ shopping and browsing opportunities in cyberspace. *Journal of Consumer Behaviour*, 1, 369–378.
- Roy, D. P., & Cornwell, T. B. (2004). The effects of consumer knowledge on responses to event sponsorships. *Psychology and Marketing*, Vol. 21, pp. 185–207.
- Sanchez-Franco, M., & Roldan, J. L. (2012). Web Acceptance and Usage Model: A Comparison between Goal-directed and Experiential Web Users Address: *הנחש עלון*, 66, 37–39.
- Scheibehenne, B., Greifeneder, R., & Todd, P. M. (2010). Can There Ever Be Too Many Options? A Meta-Analytic Review of Choice Overload. *Journal of Consumer Research*, 37(3), 409–425. <https://doi.org/10.1086/651235>
- Schindler, R. (1989). The excitement of getting a bargain: Some hypotheses concerning the origins and effects of smart-shopper feelings. *Advances in Consumer Research*, 16(2), 447–453. <https://doi.org/10.1007/s10603-011-9158-5>
- Selnes, F., & Grønhaug, K. (1986). Subjective and Objective Measures of Product Knowledge Contrasted. *Advances in Consumer Research*, 13(1), 67–71.
- Shim, S., Eastlick, M. A., Lotz, S. L., & Warrington, P. (2001). An online prepurchase intentions model: The role of intention to search. *Journal of Retailing*, 77(3), 397–416.
- Sismeiro, C., & Bucklin, R. E. (2004). Modeling purchase behavior at an E-commerce Web

- site: A task-completion approach. *Journal of Marketing Research*, 41(3), 306–323.
- Smith, D. C., & Park, C. W. (1992). The Effects of Brand Extensions on Market Share and Advertising Efficiency. *Journal of Marketing Research*, 29(3), 296.
- Smits, R., & Nikdel, E. W. (2019). Beyond Netflix and Amazon: MUBI and the curation of on-demand film. *Studies in European Cinema*, 16(1), 22–37.
- Srivastava, A., & Thomson, S. B. (2009). Framework Analysis: A Qualitative Methodology for. *Applied Policy Research. JOAAG*, 4(2), 72–79.
- Stevens, J. (1996). Applied multivariate statistics for the behavioral sciences. Mahwah, NJ: Erlbaum.
- Thompson, C. J. (1997). Interpreting Consumers: A Framework for from the Texts of Hermeneutical Marketing Insights Deriving Consumers' Consumption Stories. *Journal of Marketing Research*, 34(4), 438–455. <https://doi.org/10.2307/3151963>
- Thompson, C. J., Locander, W. B., & Pollio, H. R. (1989). Putting Consumer Experience Back into Consumer Research: The Philosophy and Method of Existential-Phenomenology. *Journal of Consumer Research*, 16(2), 133–146.
- Tomczyk, Ł., & Selmanagic-Lizde, E. (2018). Fear of Missing Out (FOMO) among youth in Bosnia and Herzegovina — Scale and selected mechanisms. *Children and Youth Services Review*, 88(February), 541–549.
- Touchette, B., Schanski, M., & Lee, S.-E. (2015). Apparel brands' use of Facebook: an exploratory content analysis of branded entertainment. *Journal of Fashion Marketing and Management*, 19(2), 107–119. <https://doi.org/10.1108/JFMM-04-2013-0051>
- Turel, O., & Osatuyi, B. (2017). A peer-influence perspective on compulsive social networking site use: Trait mindfulness as a double-edged sword. *Computers in Human Behavior*, 77, 47–53. <https://doi.org/10.1016/j.chb.2017.08.022>
- Valence, G., d'Astous, A., & Fortier, L. (1988). Compulsive buying: Concept and measurement. *Journal of Consumer Policy*, 11(4), 419–433.
- Valle, P. O., & Rebelo, E. (2002). Dualidades entre Análise de Covariância e Análise de Regressão com variáveis dummy. *Revista de Estatística*, 65–86.
- Van-Tien Dao, W., Nhat Hanh Le, A., Ming-Sung Cheng, J., & Chao Chen, D. (2014). Social media advertising value: The case of transitional economies in Southeast Asia. *International Journal of Advertising*, 33(2), 271–294.
- Van De Wiele, C., & Tong, S. T. (2014). Breaking boundaries: The uses & gratifications of Grindr. *Proceedings of the 2014 ACM International Joint Conference on Pervasive and Ubiquitous Computing*, 619–630.
- Wilson, T. D. (2002). Information behaviour: An interdisciplinary perspective. *Information Processing & Management*. [https://doi.org/10.1016/s0306-4573\(97\)00028-9](https://doi.org/10.1016/s0306-4573(97)00028-9)
- Wolfenbarger, M., & Gilly, M. C. (2001). Shopping Online for Freedom, Control, and Fun. *California Management Review*, 43(2), 33–55.
- Workman, L., & Paper, D. (2010). Compulsive Buying : A Theoretical Framework. *The Journal of Business Inquiry*, 9(1), 89–126.
- Wu, I. L., Chen, K. W., & Chiu, M. L. (2016). Defining key drivers of online impulse purchasing: A perspective of both impulse shoppers and system users. *International Journal of Information Management*, 36(3), 284–296.
- Xu, Y., Chen, Y., Burman, R., & Zhao, H. (2014). Second-hand clothing consumption: A cross-cultural comparison between American and Chinese young consumers. *International Journal of Consumer Studies*, 38(6), 670–677.
- Yao, S., & Mela, C. F. (2011). A dynamic model of sponsored search advertising. *Marketing Science*, 30(3), 447–468. <https://doi.org/10.1287/mksc.1100.0626>
- Zaichkowsky, J. L. (1985). Familiarity: Product use, involvement or expertise? *Advances in Consumer Research*, 12(1), 296–299.

- Zaichkowsky, Judith Lynne. (1985). Measuring the Involvement Construct: *Journal of Consumer Research*, 12, 341–352. https://doi.org/10.1300/J047v06n04_05
- Zhang, J. W., Howell, R. T., & Howell, C. J. (2016). Living in wealthy neighborhoods increases material desires and maladaptive consumption. *Journal of Consumer Culture*, 16(1), 297–316. <https://doi.org/10.1177/1469540514521085>
- Zheng, X., Men, J., Yang, F., & Gong, X. (2019). Understanding impulse buying in mobile commerce: An investigation into hedonic and utilitarian browsing. *International Journal of Information Management*, 48(February), 151–160.

Appendix 1

Transcription of interviews

Interview #1 – Chilean male, living in the US

Interviewer: I'm doing the research. This is the research about my thesis project that I'm working with. It's about online browsing. I think I told you about it. What I'm doing, I'm talking with some consumers about their online and offline browsing habit. So, pretty much I'm going to talk to you about this today. So, I want to start, I would like to ask you to first talk a little bit about yourself about what you do, your age, where you live, have you lived in America mostly or no. A little bit about your background.

Interviewee: No problem. Okay. So, my name is (edit). I am 40 years old. I am Chilean by birth. I lived most of my life in Chile. I'm a PhD student at NYU, lived in the US for four years. I have an American partner. I came to the US initially with a Fulbright scholarship. What else might be important? I have a master's in filmmaking. Oh sorry, my PhD is in education and technology. I have a master's in filmmaking from a UK university. I live in the UK for two years. I lived in Spain for two years prior to that and before that, also after that I lived in Chile and I worked in media as a journalist first then as a documentary editor, then as a documentary editor and a professor of film. Then most of these are professor film and creativity coach.

Interviewer: Oh, great, thank you. We're going to talk first about online and offline browsing. First, I usually talk about offline browsing, browsing is when you go out in the mall or in the stores but without intention to buy anything, particularly just browsing. Do you just browse in stores for clothes or any other products?

Interviewee: I mean habits change. I rarely browse without an orientation to actual shopping. If I'm going to buy something I might look around, but besides walking on the street and kind of looking at ad, window and seeing whatever is there and because I'm a 6ft 3" gay male, most of the stuff in the windows is not directed to me or my taste. So, I do very little kind of offline browsing. I do not enjoy like say going to a mall to just window watching. I might go to a shopping mall but it's with a very clear orientation to basically do as much shopping as I can, so I don't have to do it again. So, and I haven't done it in years. I mean, I don't think I've been to a mall in I don't know. I think the last time was when I was in Chilean, it was actually to meet with friends. When I lived in Spain, I would sometimes go to big outlet malls but it basically to get me all the stuff that I needed for the next six months in one sitting.

Interviewer: Okay. So, you don't like to go shopping?

Interviewee: I don't like to go shopping, no.

Interviewer: Was it always like this, when you were younger you also didn't like...

Interviewee: I wouldn't quite say that I don't like to go shopping. I don't love the idea of going shopping but once I am there and I am actually purchasing things, it's okay. I kind of like to have nice clothes and like the idea of going to the mall, especially as an alternative to doing other things generally was never appealing to me. Once I was there I was actually kind of enjoying doing the actual shopping itself, yes and has it changed? Yes, and no. I mean, I remember a period of my life when I used to do it more, going to the mall and it was partly because my partner like to do that. So I would go with my partner. Me by myself, I would not do it often but particularly with clothes, I would rarely kind of have the drive to go and buy clothes.

Interviewer: When you use to go with your partner, what did you feel when you were browsing?

Interviewee: Sorry, could you repeat that question?

Interviewer: What did you feel when you were browsing with your partner?

Interviewee: What did I feel?

Interviewer: What did it feel like? Was it something you didn't like or...

Interviewee: No, I mean I enjoyed getting nice clothes. I really enjoyed feeling that I was getting something very cheap that used to be kind of expensive and that I thought looked cool on me. We would usually go to Zara when they had like their crazy sales to be honest, it was very targeted. We will basically go to Zara to Esprit, which is a Norwegian or something brand that is not here in the US. Zara, Esprit and let me try to think H&M maybe like one or two other brands. It was very kind of selected places, these are the places where we get our clothes from and we would try anything. I mean, in my case because I'm tall, it was pretty much try most of the stuff that was my size like XXL and if it fit and it was cheap which the sales of Zara back then were very crazy. You would get a jacket for like the equivalent of \$10 or \$15 or something. I would usually just purchase it.

Interviewer: But you like when you find good deals.

Interviewee: Yes,

Interviewer: exactly that...

Interviewee: Yeah, that was very satisfying.

Interviewer: That's what you're saying, Okay. So you go to specific stores when the browse, like you don't go to stores, you don't know.

Interviewee: No.

Interviewer: Usually you would just go into stores that you like.

Interviewee: Yes.

Interviewer: Okay. Do you ever come across things that you didn't expect when you were offline browsing? Like brands that you don't know, products that you don't know...

Interviewee: Only for small thing, like there will be cases where I would be and this would really have happened to me like in Chile but there'll be like a couple of like cool stores that would sell. So here's the thing, like I said I think part of what was very satisfying to me as a purchaser was the actually getting really, really good deals. The number of stores that are actually go on sales that are that crazy are limited and particularly much smaller specialty stores rarely do that. So I would sometimes be walking around like where my office was which is kind of like a cool little neighborhood and they would have kind of like nice little shopping stores and I'll go in there just because it was an extra cafeteria and I had some time to kill and I might look at something or try it but it would be like a t-shirt, like very small items and it tended to be limited and it tended to be rare.

Interviewer: Okay. Do you do that only for clothes or other kind of products like home stuff or...

Interviewee: Like what?

Interviewer: Like things for home, like home decorations or books? Any other kind of store kind of products besides clothes?

Interviewee: My habits for different types of products are very, very different. I would go and browse a lot for books. I really enjoy going to kind of bookstores and just hanging out there and not buying anything. There were a couple of good bookstores around where I work now and I would frequently pop in. I have to say that I do that less and less although I still, maybe three or four times a year we'll go to the strand. It's a big book store here in New York and kind of browse around and kind of like just look around and sometimes buy one little item or not even do that. The younger I was the more I actually dislike to be in bookstores and just do browsing. In, what did you say home items? not very much, no. I mean for things for decoration, I would browse and purchase on places where you could get like really quirky and unique stuff like flea markets and antique stores and those kinds of places. Like I would look for interesting objects to bring but it was the rare occasion where I would like to buy something on a big store for my house. Here in the US, I sometimes do that, in [inaudible] but again it's still rare, like I don't do it more than once a year. Let me just think what else, I sometimes do like kind of food item stores that kind of kitchen things, like what's the name of the store? Like [inaudible 11:08]. I will go to those kinds of stores and do offline browsing, kind of look around and look at things and think about what stuff I would like to buy and actually not buying anything. Also stores that sells spices, I think that covers everything that you already said. House, books and grocery.

Interviewer: And groceries. Do you like to browse for groceries or...?

Interviewee: Not to browse but I love going shopping for groceries but I will never go in to the supermarket just to look at veggies without buying anything, no. As lovely as they can be, actually that's not true. That's not to completely true. I can enjoy going to farmer's markets and actually like you're not buying anything significant and just like looking at what they have and how expensive it is. Grocery shopping, yes I actually do quite enjoy doing grocery shopping, person to person. I'll actually do that normally twice a week, sometimes three or four times a week.

Interviewer: Oh, nice. So for books and kitchen supplies and groceries it has like positive feelings about browsing, offline browsing?

Interviewee: Yes

Interviewer: ...and when you're doing them, do you have any kind of relaxation feeling?

Interviewee: Kitchen? Kitchen things for sure. Books, I think I used to have a feeling of relaxation. Right now, it's pleasing but I get a feeling of kind of like not knowing enough and not knowing how to read the codes of American bookstores as well as I knew how to read the codes of European and Latin American bookstores. So this is going to sound very silly but the kind of the quote unquote the language of books is different in different kind of cultures and both Latin American and European publishers will actually create covers where the publisher and the collection is very prominent. So you were looking at a book and you know it would be like it belongs to this collection which is this type of books. These are books that are highly literature and like are supposed to be from respectable authors. These are books that are classics because they look like this and these are books that are like romance novels because they look different and these are books. So American bookstores don't really do that for marketing like almost.... Either I haven't learned how to read them or it's not there. I mean you can distinguish a romance novel but most of the other things, it's very hard to have a quick sense of kind of like what are the big quote unquote status category in which this book kind of falls and that's something that I would use to help me navigate the chaos because when you enter bookstore, there's a billion books so I wouldn't know that. So today I feel like I don't know reading a new novel or reading a mystery novel. Okay, cool, so I have to go to the bookstore that look like this and I would just be able to ignore everything else and not having that orientation can be frustrating. I'm sorry if I'm going into like a very specific thing. So, but that has kind of affected how much relaxation I feel. I certainly used to feel very relaxed. I certainly also used to have positive feelings and feel relaxed when I go to cooking shopping stories. In the case of food, I'd say yes and no but there has to do I think a lot with how shops are set up here that sometimes you have to be in a very long line and it can be a bit of a hassle or they may not have the products that you want because it's more oriented to purchasing as opposed to just browsing and sometimes the actual purchasing experience cannot be as, can be, troublesome. Because I like trader Joe's because they have good products but if you go to trader Joe's there's always a line. So you better have a podcast downloaded because they might not have Wi-Fi and you're going to be standing in line for 20 minutes. So those kinds of things are certainly not relaxing even despite that I still enjoy the experience.

Interviewer: Do you ever lose track of time when you're doing this? Like you plan to be there like for one hour and then you spend an hour and that's it.

Interviewee: I never spent one hour in the shop.

Interviewer: No, no. I know. It's like when you be like that for 15 minutes, then your 15 minutes, that's it.

Interviewee: No, no, I don't do it. No.

Interviewer: and do you buy things that you were not planning when you're doing this?

Interviewee: Absolutely. Yes, on bookstores and on cooking stores and what else are we talking about? Not all of them. Yes, I certainly, I'll shop on supermarkets. I'll buy a bunch of stuff that I wasn't planning on buying, yes.

Interviewer: Okay. But do you regret them or no?

Interviewee: No, not generally.

Interviewer: Not Generally

Interviewee: My partner hates it because I use all the space but...

Interviewer: He complains about it?

Interviewee: A little bit.

Interviewer: Okay. When you're browsing, what is your relationship with the sales team or salespeople that are in the stores?

Interviewee: I want them to stay the fuck away from me and not talk to me please.

Interviewer: You don't like to be bothered?

Interviewee: I hate it

Interviewer: in Chile.

Interviewee: I might want to ask a question from somebody but if somebody approaches me when I'm doing my thing to ask me whether I need help I will want to punch them in the face seriously. I mean, I'm not going to do that. I'm not going to be rude; I'll say a polite thank you but no, but I generally don't enjoy that.

Interviewer: Okay. In Chile, is it like in the US at the stores, the sales people or they...

Interviewee: Is it what, sorry.

Interviewer: In Chile, in the US are the salespeople, do they are usually the, they behave the same or they are different?

Interviewee: That's a hard question. I think Chilean sales culture tries to instill a US sales culture in the sense that's salespeople should try to approach you and be nice. I think that was not naturally the orientation of many people in Chile and I also think that is not naturally the orientation of many people in New York in particular. Like my experiences like in other parts of the US salespersons are very smiley and like super nice and super kind and, and in the US sometimes they are, sometimes they aren't. Sometimes, they're a little bit sassy and in Chile, like sometimes they are kind of like very nice in this very fake way. Sometimes they are kind of a little bit rude or you kind of like have the feeling of that they hate their job. To answer your question, similar in some ways, different in some ways.

Interviewer: Do they ever approach you?

Interviewee: Yes. They have the same script. They have a very similar script like if they see somebody walking around, you should approach them. Again, I think not all the sales people in the US and at least in New York, I don't think they all follow it. I don't think everybody in Chile follows it but in big stores they have a similar, have a similar kind of orientation. Yes.

Interviewer: Okay. We're going to talk about online browsing now, okay?

Interviewee: Okay.

Interviewer: About online, what are your habits online? Do you do lot of information search? Do you like buy lots of things on the internet or no?

Interviewee: Yes, I buy and as a household we buy a lot of things on the Internet.

Interviewer: Okay, what kinds of things?

Interviewee: All sorts of things. We bought furniture on the Internet. We have bought some food but that is more rare. We buy a lot of technological stuff, cables and plugs and all that hard drives. We buy much of that through the Internet. We bought some of the kitchen appliances that we have on the Internet, specific food items like an Espresso, pods. We buy online, let me thin what else do buy online? Oh, health and fitness supplements. Well, my partners sometimes buy clothes. I have only done it once or twice.

Interviewer: Why?

Interviewee: Because I'm really tall and I like to know how something's going to fit me before I buy it. The way that something's cut is very important. So through my experience, I bought a bunch of things from Zara once and the things that I kept, I actually ended up returning half of them because many of them were, didn't really fit me. I know that also sometimes when people return things basically you are throwing away those clothes and that idea is very...that bothers me a lot from like an ecological perspective that you noticed like I can't and Zara Send me a jacket and I tried it and then it will basically be sold in a big bundle of stuff or with like just use clothes like it was even though it's a perfectly new item.

Interviewer: Shoes, do you by shoes online?

Interviewee: I have bought shoes online. Yes, again it's been rare and it's usually been shoes that I have like, you know, like I've bought another pair of the same shoes. Only once I bought like totally new shoes and I bought two pairs and one of them just didn't fit me at all. I mean that's why you go to a store; you try these things. So often with shoes or whatever like my experience has been very hit or miss. Either what you get doesn't really look at all like the picture used to look like, these shoes look great and then you put it on and they look very, very just vulgar and Gosh or I mean you try them on and they're very uncomfortable or you try a jacket and it doesn't really fit you very well. So I prefer to buy my things in person for clothes. For other things that you can get a good idea of what kind of product you're getting like things that I have seen at the food appliances store, I'm perfectly comfortable buying online. Like I don't know, we bought a big mixer that is very expensive, I know that mixer, I've seen it a thousand times I know exactly what it's going to look like and what the product is. So, I feel very confident of buying it online and it has benefit that it's usually cheaper than buying it in person.

Interviewer: Okay. Do you do intentional online browsing? That is like when you go to Amazon just to see what's in sale or just to...

Interviewee: Rarely. I tend to go to Amazon when I want a product. I might be tempted by some of their suggestions sometimes, particularly with books. I'll buy a book and then amazon suggest something else and I'm like hmm. I might not buy it right then, might want to think about it. But sometimes I put it on my wishlist. I will, however, browse when there are sales, when they have like their big Amazon days and those kind of you have to buy in the next 20 minutes or else you won't get it. I will browse through products when that is happening and actually do a fair amount of shopping

Interviewer: When they're doing this sale.

Interviewee: When or where, sorry.

Interviewer: Yeah, okay. Are there's any other websites that you go intentionally to browse?

Interviewee: I used too but I haven't done it any more. I remember the name of it. Oh, it was called thrive market. I try to be health oriented when I buy food. I'm not as health as I would like to be but have you said, I'd like to tell myself that I am. I would say like two years ago it was actually not easy to find organic products on major stores. So for specialty items like pasta that is not made of wheat but it's made of beans or whatever. So back then I would browse this provided it is called thrive which is kind of like all organic products and all kind of healthy food and I would just look around totally liked buy stuff that I was like, oh this is interesting and I've never tried it, I'm going to buy a few of these and see if I like them. Let me think that there's anything else. There's Amazon, there's thrive. I have browsed at food supply stores but honestly I've done it once or twice not more than that.

Interviewer: Do you, what we call unintentional online browsing? Like when you're on Instagram and may see something.

Interviewee: No, I rarely use Instagram.

Interviewer: When you're like reading something in Instagram, and you see an ad or something like this.

Interviewee: No, I mean I might follow an ad if there's something that makes me curious but it's rarely something that I want to buy if that makes any sense. Like for some reason the Internet is convinced that I really, really want some of these like crazy tight pants with leopard prints on them and that's because once like an ad was there and I was like, what's this thing and I clicked on it. After that, every time I open Facebook, Facebook tries to sell me leopard printed pants. What else, like I'll see an ad for something that's completely unattainable but it's kind of

looks pretty like paintings at Christy's and that looks like something that seems interesting and cool. I'll go there and not thinking about buying anything for sure. It's stupid but you know, look at pretty things.

Interviewer: Do you know when you browse the internet, when you see like a product or a brand that you didn't know and you find out just by accident?

Interviewee: I'm sorry, could you repeat that question?

Interviewer: When you are searching for things on internet, it can be a service or product. Do you remember finding things that you did not know before and you got to know them and you like them, product or service, things like that.

Interviewee: Yes.

Interviewer: Does it happen often?

Interviewee: No. For example, when there's those Amazon sales like I'll browse around a lot and that has led me to purchase things that then became a habit for me to purchase. Some examples that I can remember, this kind of really kind of pretty decent brand of underwear that has like coconut in it. I used to buy another brand that's called Crayola or something. It's really good, it just like keeps you sort of clean. It is anti-bacterial underwear. So, Crayola is very expensive and there's this other brand that has the same thing or very similar product and it was way cheaper and I bought it once and they fit me really well, so I have bought it again and many times after that. Also with many health supplements and I know the types of products that I wanted, but there's other products that have like a mixture of a bunch of these kind of like work out enhancers or whatever. Again, I've stumbled upon them mostly on these like Amazon sales like you can buy it for half price and I'm like okay, cool. I might just as well try it and since then I have actually incorporated that into my routine. Those are the kind of like the types that are most salient. They kind of like have become something that I sort of buy repeatedly. I'm trying to think if there's anything else, that was the section that most likely buy repeatedly so...

Interviewer: Do you browse for like traveling stuff?

Interviewee: For travelling stuff?

Interviewer: Yeah,

Interviewee: For traveling trips or whatever, I do all my trip purchasing online. I use Google flights to buy tickets before that I used to use Kayak or other platforms. I don't generally browse, it's pretty like directive. I've decided to travel somewhere on certain dates, maybe with some flexibility and I'll go and just like figure out the price, see if it's attainable and then buy. I rarely do it where I don't know where I'm going. No.

Interviewer: Okay. Do you browse about, online for apartments?

Interviewee: No.

Interviewer: Any other specific kind of product, like special, like cars or something like this?

Interviewee: Not cars, no. Any other special that's kind of oriented to purchasing? I'm trying to think, not cars... sometimes buy games online like board games. I mean I've done that once or twice but it's the same kind of old sites, I usually just do it through Amazon. Oh and there's another face like and whatever products. I mean that's also pretty targeted. I basically buy all of that from the body shop and I'm on their mailing list. So sometimes they will have sales and like I'll go browse when they have sales and that is, usually I am targeted. I mean, mixture of targeted and non- targeted. I'll know that I need a moisturizer and I need a whatever, something for my eyes but I might find a whatever, like a cool thing for my beard and it's like, oh, that's cool. It's cheap and I'll buy it.

Interviewer: You like to do online browsing when you are on a sales motive?

Interviewee: It's mostly all sales, yes. Except with Amazon, with Amazon if it's something that I can't get easily on any of the stores I usually go to. We'll buy those things through Amazon. We usually receive one or two boxes of Amazon products every week, if not why.

Interviewer: Do you feel like you buying things like impulsively when you're doing that?

Interviewee: Nah, no. I will want to buy them impulsively so what I usually do is like I'll put them on my wishlist and sometimes I revisit it. I have decided that it's actually something that I would like to have and then actually buy it but more often than not, they just stay on the wishlist forever.

Interviewer: Oh. So before buying, you think about it and then you buy it.

Interviewee: Yes, okay. So the only times when I really buy impulsively is on sales because it has to be done right then and there. If it's not on sale, I will think and it's not something that I was intending to buy when I started browsing. I'll actually put it on my wishlist so that I can think about it later.

Interviewer: Do you browse for information? Or for a specific hobby you have?

Interviewee: Well sort of. I mean, they sometimes browse for, we will go to kind of exercising sites or bodybuilding sites to get tips to workout. When I have trouble with my plants, I go to sites to kind of like figure out how to not kill them. What other hobbies? I used to browse around the criterion collection when I was into buying fills but now you can get everything online. So, I don't do that anymore. Let me think what else, what other hobbies do I have? Those are the salient ones. I mean if this is anonymized like I would say that I do browse for porn but I don't purchase anything.

Interviewer: When you're doing this you browse for sweetness, chips and stuff, do you get only information? Do you find yourself in websites where you can buy stuff? Like you can buy up?

Interviewee: I mean, most of these websites have like ads associated or actually have their own brands. In the case of bodybuilding thing like I have a couple of sites that I like and I don't like the brands of products that they sell. So, I might get the recommendations for getting these types of supplements and get them from the brands that I prefer. In the case of, so sorry I said bodybuilding, what else do I say?

Interviewer: Do you get the information about the product and then go look for if your interests?

Interviewee: I use to like I now have all the information that I need I feel because I haven't changed my regiment of supplements in two years. Basically like at some point in my life I was like what kinds of supplements should I use for what? And I read a bunch of articles and these articles were from a couple of different providers like men's health and bodybuilding.com and a couple of others. They, and of course they were associated with the sales of certain products from their own brands or from brands that they advertise from. I would just get the same supplement from a different brand.

Interviewer: Do you use, you said you don't use Instagram right?

Interviewee: I mean; I have an Instagram but I barely posted anything in it.

Interviewer: So, like you use Facebook?

Interviewee: Yes, but less than less.

Interviewer: It doesn't matter.

Interviewee: I don't think I've checked it last week, for instance.

Interviewer: Do you, is there any social media that you use?

Interviewee: I'm a busy PhD student so I don't really have time. I don't have time for that but if there's any sorts of media that I use, it is... I mean, WhatsApp is social media. I do use that a fair amount. It's not public social media but it is. The social media that I use the most is Facebook and again, like I've been getting off the use of it. If you're going to ask me if I click on Facebook ads often, the answer is very rarely. They actually annoy me and I feel I might click on ads in other pages but almost never on Facebook for some reason. They feel very invasive.

Interviewer: Invasive.

Interviewee: Yeah.

Interviewer: Do you receive lots of newsletters or email?

Interviewee: Let me see some, yes. I have a newsletter from Cook's illustrated asking me to buy things. I've never bought anything with them besides the magazine which I have. I received the newsletter from the body shop. I sometimes buy things from them. I think those are the ones that and then there's a bunch of like research and newsletters and all that but that's unrelated.

Interviewer: Well, is there any online store that you like to visit but you never buy anything there,

Interviewee: I like to visit. I mean, how frequently

Interviewer: You'd like to go to see the website but you don't buy anything there

Interviewee: More than once.

Interviewer: Yeah.

Interviewee: I think I've opened like solely tablet like three or four times to just look around, but it's only three or four times. It's not a habit.

Interviewer: Okay. But you just looked around for a while.

Interviewee: Yeah.

Interviewer: Okay. When you're like on Amazon looking for the deals, do you lose track of time?

Interviewee: I mean waste time; I'm going to try to lose track of time. I get bored after 15, 20 minutes of that I think. Yeah.

Interviewer: You get bored, do you feel like you lose time? You waste your time.

Interviewee: Yes, absolutely. I feel most shopping is a waste of time.

Interviewer: Why?

Interviewee: I mean unless it's for food I feel like kind of sort of have everything that I need.

Interviewer: Do you think that after the Internet like after you start buying things online, what changed in your behavior as a consumer?

Interviewee: Oh, a lot. There will be a lot of like little specific things that I would like to have and that were hard to get that I now purchase. It would be nice to have this very specific cable to connect my, I'm a documentary editor so to connect this thing with this thing with this other thing. I wouldn't have bought that if it weren't because of the internet or I have a drawing tablet which I have used twice. I think that's very much because of the Internet. I have a bunch of these like crazy organic products or weird health things I don't think I would've bought but through the Internet. I'm certain I wouldn't have enough schlepped around New York City with these like giant tubs of protein if it weren't because of the Internet because it's very uncomfortable. So there's a lot of things and there's also just kind of products from strange and obscure brands that I wouldn't have had access to like I told you about these underwear. I haven't never seen them being sold anywhere or a store. There's some very specific kind of like gardening things that like when I'm in Home Depot, it's a store that I really don't like so I probably will be trying to just like get what I need and get out of there. So maybe they sell these other specific products but I wouldn't have found them because I wouldn't have been looking for them. So I'm talking about things like I have a mixture with kind of vitamins for my air plants. I have air plants which I also was really interested. I have like a special type of like bacteria soup that makes plants grow better that I also bought through the Internet. So very specific things that either you don't find at kind of regular stores or they are a little bit more hidden and that I probably wouldn't have been looking for. Yes, it's certainly, the internet has changed my purchasing habits. We also have a bunch of Google homes at home and we bought all of us through the Internet.

Interviewer: Oh, nice. Is there anything that you buy or search online that you wouldn't like feel comfortable doing that offline?

Interviewee: No, but that was not always the case. I have purchased a bunch of sex toys both online and offline but certainly, you know the gateway drug was looking for them online. Once I kind of got more familiar with that and guess desensitize or kind of like feeling that it wasn't so... I mean, I guess also the culture around kink has changed so now it's less. It makes, at least me feel less guilty, I guess would be the word or I don't know or ashamed of being a little bit kinky. So, it was kind of nice to explore and to see what was out there but since then I have gone and bought jockstraps in an actual face to face sex stores and other sex related items. Let me think about something else. I mean, I told you that like for specific organic stuff, it was very hard to get those things offline before that has since changed. So I get most of like my organic produce and I'm getting products from trader Joe's or whole foods or just my corner store that has a lot of those things but before I would get most of those things online.

Interviewer: Okay. Well, think that cover the topics,

Interviewee: Sorry, say what?

Interviewer: I said I think that's it.

Interviewee: Cool, cool. I hope this helps

Interviewer: Yeah, it does. Just let me...

Interview # 2 – Brazilian female

INTERVIEWER: first of all, I would like to let you know that I am recording this interview... haha. as you can see in the Skype notification, because I need to record and hold this as a document to keep, and also to use it to transcribe and analyze.

INTERVIEWEE: OK

INTERVIEWER: I am going to change your name when reporting this interview, so your id will be preserved, as an anonymous interview. And about the video being capture, I might use it in the future, but solely for academic purpose, like showing in an academic conference or such, without any commercial use, ok?!

INTERVIEWEE: Ok, agreed.

INTERVIEWER: Thanks again for participating, let me tell you a little bit about this study. It is part of my first study in my doctoral thesis. I am studying the differences of online browsing, and offline browsing, that is when you look for things without the intention to buy it. So I am analyzing the differences you have when you browse online, and when you do it offline, you know, when you go to the mall, to see what is new, the differences, aspects, things like that. This is the first study of my thesis. Well, I would like you to start telling me a little bit about you, what do you do, what is your daily routine like, including your shopping habits.

INTERVIEWEE: Ok, well, my name is Manami, I am an architect, graduated from USP Sao Paulo, I also have a specialization, MBA in branding from Faculdade Rio Branco also in Sao Paulo. I have worked at 3M as a graphic designer, and from the last 2 and a half years I have been working at Market Strategy, which is a consultancy that is located here in Ribeirao Preto. And I have been responsible for the project Sou de Algodao that is an ABRAPA initiative to incentivate the use of cotton in the textile chain. I am responsible for Communication and Marketing, and I work with the Press agency, creation agency and other suppliers, to create campaigns and marketing actions to incentive the use of cotton...mmm.. about my daily routine, mm.. my work is more focused on the project, mm. we research about events, look for suppliers, specially in the fashion segment, as it is a key one for the textile chain, so we research a lot about fashion, so our searches in the internet is about this, fashion, and eventually we search for options to purchase things for the project, things, services, we also search about fashion designers, fashion events, to see if we can find opportunities, so we use internet a lot, to research a lot of things. Now, about my personal use, when you consider about, like, consumer behavior, me, Manami as a consumer, I use a lot of internet to research, mmm, the main reason I use internet is to research about things that are not that differentiated, with some characteristics that can be easily compared to, with few differences in branding, and more in technical characteristics, like home appliances, like refrigerator, in order to compare the different options that are there. I do that much more online than offline, in their stores, where I go to see the product myself, to touch, so my research habit online is much more directioned, determined by a need to know something, let's say, much more started by a need I have, than out of curiosity. It is much more about that. I am always in the mall, haha, my son practices swim in a gym that is located in a mall, so when I take him there, instead of letting him there, and getting him back, I ended up staying in the mall, because it is such a short interval of time, it is not worthy to go back, then I walk around the mall just to see what is news out there, to see the stores, when I need something specific to buy, then I walk around following that need, aiming to buy some specific product. But when I am there, walking in the mall, I feel like I am more prone to buy something impulsively, like, when I found something I like, I ended up buying because I liked, but I wasn't planning on this, so I feel like I am more vulnerable to impulsive buying in the mall, something that just does not happen online. I feel that on the internet, I am more focused, when I search online I know what I want to buy, if I dont buy I at least know some characteristics like price, options, payment methods, as an example, to evaluate when would be the best time to make the purchase. as an example, items we consume, as an example. I have a kid at home, and as you know, kids grow very fast, and we always have to buy clothes, shoes, in moments like these, internet is really helpful to me because it helps me finding good deals, in sale season, sales from specific brands, I usually know that there are moments of price reduction, like, Adidas websites, or other sites that I like, so I keep looking to see if the price really decrease, to see which is the best moment to buy the product, so, I go there to see in specific dates, like in the beginning of the year, when they have these huge sales, I usually do not buy during Black Friday, I think there are lots of tricks in this date specifically, we see better opportunities during the year, like, specifically when I purchase shoes for my son, I usually do it in the beginning of the year, and I buy 2 or 3 different sizes, projecting his growth throughout the year, sometimes even 2 years. I think it is important to do that, I do it with other products, like clothes, because I think it is important to take advantage of this period of price reduction, because, after all it is the same product, but with a better price, right?! And we can make better use of our money, right? Basically it is that. Sometimes I search for some things on the internet, in, like, celebrative days, you know, to see specific products like, wine, chocolate, in specific

seasons, I search to see the bundle of products offered during the season, more to know what is available out there, so, overall, the search I do online makes me save time, that is what I usually do as search online.

INTERVIEWER: Ok, i am going to make some questions now, about this you have said, in order to elaborate them, ok?

INTERVIEWEE: OK

INTERVIEWER: when you say that you are always going to the mall because of your son classes. Is it a habit you started because of your son, or did you use to go to the mall before you had him?

INTERVIEWEE: Humm, before I used to, I mean, I used to go, but not as often as today. Today I go at least three times a week, last year I used to go almost everyday because he used to practice from Monday to Thursday, and we would eventually go there in the weekend, for leisure, or just to eat, because you know, the mall offers you this convenience, where you can have a little of leisure time, food, and mainly safety, you know, this is a priority to us, to feel safe, humm, so I used to go the mall before, but now I go much more often, and humm, let's think about yesterday, for example, Yesterday my son has swimming practices, and I decided to walk around the mall because it didn't make any sense for me to be there at the gym, waiting for him. So, I decided to walk around to see new products launched in the market, like, I am used to always go to the same stores, then I went to see new products in the stores I like, I went to Etna to see new products in home decor, furniture, but, basically, just walk around

INTERVIEWER: You mean, just looking (browsing)

INTERVIEWEE: Yes, just looking,

INTERVIEWER: Did you buy anything?

INTERVIEWEE: Yesterday, no,

INTERVIEWER: But do usually buy or don't buy things?

INTERVIEWEE: Lately I have been more restrict, depends on how I am in the moment, lately I have been more restrict. But no, I usually don't buy, when I go and buy is when I left home with an objective in mind. I need to buy, so, I think I am a bit different in that matter (from other consumers) because I go with a specific goal, I mean, I am not that influenced by the branding, because I always go to the same brands, brands I identify myself with, or some brand that I like the product, or I enjoy the experience of being in that specific store. It is very rare for me to enter a store that is not known, you know, I store I am not familiar with, I enter it and buying something there. I don't do that, I mean, at this moment I am not doing that anymore. I don't know, I don't buy more impulsively, without considering what I am going to use that product for, it is not something I do now, I feel like I am more rational now.

INTERVIEWER: This rationalization is for what you buy to your son, or just for you?

INTERVIEWEE: Both, I think. I mean when we are younger, we are less rational, you know. You see something you like, you see something different, like a toy or something and you have the urge to go there and buy it. I used to do that, but not anymore. I think this is nocive, not good, because you buy things you don't need, it is not a responsible way to use your money. I think it is important to show our kids that we need to be responsible when spending our money, because it may be gone when you really need it, so I think it is an important message to pass it on. My son tests me all the time. We enter a toy store, and he begins to ask for things: I want this toy, I want this car, and I remain confident, "no, we are not going to buy", and we leave without buying anything. Perhaps, hum, it hasn't always been like this, there has been cases where we loosen the control, and bought stuff we didn't need, but not anymore, specially now because we see that is important to keep it together so we can afford and sustain our lifestyle. We have to teach him that. that if he buys a toy every week, we won't have money to buy a good present in special dates. gifts are not meant to be given everyday, they should be special, so I think it is important to teach him this responsibility and make him aware of that.

INTERVIEWER: I see. Let's talk about these episodes of losing control that you mention. do you recall how were they? Did you leave aiming to buy something specific, and ended up finding other things to buy, or you were just looking and found something that capture your attention. Were you with your son? Please elaborate on that.

INTERVIEWEE: Sometimes, I think, there are times that it happened that I have done that in order to compensate for the time I am not there, to buy something for him that was like a treat, like, for example, I was in Congonhas airport to go back home, I had some time to spend, so I start browsing in the stores of the airport, and I suddenly found a giant Snoopy, which was a my favorite toy when I was young. I immediately wanted to buy it for him, as a treat. But it was a big Snoopy, and it was expensive, like 150 reais (around \$40), so it is not a treat, it is a gift indeed. And he doesn't understand these differences of monetary value, emotional value, so it is not good to give big presents like this, so for me it was an impulsive buying episode, so, it could happen, like when it happened with clothes for kids, when he was smaller, I was travelling at work, had some time to spend, I used to go a mall, and there I would find several clothes for kids that are beautiful, and I ended up buying lots of clothes, that he would wear them, 2, 3 times top, and then we will have to discard them. It used to happen, but not now, now I am more aware of that, also I have learned more. Now I know that he outgrows his clothes too fast, during weekdays he wears uniform to go to school, so he mostly wears his clothes on weekends, so there is no reason to buy so many clothes for him. so we begin to create a new mindset to buy things for him, and we learn and it is easier to control it. The impulsive buying, then, reduces with this knowledge, this consciousness, so now the impulsive buying is more food related episodes, like buying an ice cream, than a product buying impulsiveness. So for product is much more difficult to engage in impulsive buying now, specially for products that are more expensive.

INTERVIEWER: I see.. Thinking about these episodes. Like the Snoopy you bought. Did you regret after purchasing it?

INTERVIEWEE: No, I didn't, even because today this is his favorite toy as well.

INTERVIEWER: So, you didn't regret it after all,

INTERVIEWEE: Not in this case, no, but I recall some cases where I did regret it. I remember when I was younger, when I didn't have kids, that I had lots of clothes, and I kept buying new clothes. I remember discarding clothes that I have worn very few times, like in these reality shows, where people have clothes with the hangtag still on them, several clothes they bought and never worn. That did not happen to me, but I feel like that I did not need all those clothes. What makes me more conscious about my consumption habits was definitely my son, because when you have a son, you have to stretch your money, make better use of it.

INTERVIEWER: Do you buy things for you and your son, or do you buy things for your husband as well?

INTERVIEWEE: I buy it for all.

INTERVIEWER: Do you like to do this?

INTERVIEWEE: Humm.. no. Haha

INTERVIEWER: So you just do it because you have to?

INTERVIEWEE: Yes, because I am obliged to,

INTERVIEWER: So, no pleasure at all?

INTERVIEWEE: No, no pleasure. Even groceries, I have to buy. I wish I could share this, I think it is mainly because I am the one with the bigger salary, so I have to be more present and relevant un taking care of the house. I think, hum, I mean I think this is an organic movement of life.

INTERVIEWER: now let's talk about when you go to the mall just to browse, when you go to the stores you like to see what is new, I want to ask you what is like your perception about the salesperson in these stores? Their presence helps you, bothers you?

INTERVIEWEE: Depends on the store. I think it depends more on the sales training that these salespeople have. Depending on the store, you have a more health relationship with the salespeople, but depending on the store, it is not so good, like when you just enter a store, and they immediately ask you "Are you looking for something specific?". I hate that, I have just entered, I don't know what I am going to see. This happens with Hering and PB Kids. At PB Kids, I know the salespeople, I have a relationship with them, so we chat, even when I am not looking for anything in particular. But at Hering store, no. And it happens in every Hering store, they are always following

you, pressuring you. And I just want to see the new collection, I feel pressured. When I do have something to buy, I always reply with the specifics, “I am here to buy a gift for my husband”, but when I am not, I feel pressured and it is not enjoyable. In stores that I usually, where I have set relationship with the salespeople, it is a healthy relationship, regardless of buying or no.

INTERVIEWER: Do you recall if when you used to go the mall, when you were younger and single, did you use to go with friends or by yourself?

INTERVIEWEE: Usually alone.

INTERVIEWER: Like a “me moment” ?

INTERVIEWEE: Yes. Actually it was like a therapy. Because there were some salespeople I had relationship with, so it was fun, I used to go and chat, and it was like the social interaction of the day for me, so it was fun. I have somethings that I like to see. I like to go to the market to buy groceries. It is rare for me to go to the market and leave without buying anything. and I do think it is fun to go to the market. I like to walk around and think about all the things I can buy and prepare. I like to cook, so it is always fun for me. Usually I buy something in the market.

INTERVIEWER: And do you enter without a purchase intention?

INTERVIEWEE: No, I usually go because I need to buy something, but I ended up buying much more than I needed to. At the market I feel like I buy much more impulsively than in the mall.

INTERVIEWER: When you say when you used to go to the mall as a therapy, what do you mean by that?

INTERVIEWEE: It was a moment of relaxation. I felt relaxed after.

INTERVIEWER: was it the buying that relaxed you or just walking around ?

INTERVIEWEE: Just walking around. Of course there is a happy feeling for buying something, but for me, sometimes it makes me anxious, specially when it is a high value product, like a sofa. I buy, and I keep thinking if I should have bought it, and why. I have this kind of anxiety with all products that are more expensive. this does not happen with clothes for me. I am more controlled when it comes to clothes because I am more controlled when it comes to clothing. I have like a limit to buy new clothes, so I never pay much more than I anticipated to pay. I wouldn't pay 1,000 reais in a piece of garment. I have like a limit for each kind of piece. Of course, there are occasions that I need to pay more, like cocktail, party clothes. But I always try to buy things that I can wear it in multiple occasions. Like, it is hard to find a social garment that is made of cotton, so when I find them, at reasonable price, I tend to buy 2 or 3 different garments. I have rational criteria for shopping, like I wouldn't buy a leather jacket with a design that is not timeless. I wouldn't be able to wear as many times, so I rather not have it.

INTERVIEWER: Do you apply these rational motives to other things, besides clothes. Like home appliances, for example?

INTERVIEWEE: I do, like I am always pondering the benefits and the costs. Let's use my cell phone as an example. I have a motorola cell phone. I refused to pay 5 thousand reais for a cell phone (around 1,250 dollars) from Apple or Samsung. I won't do that. For similar functionalities, I bought this Motorola which I paid, like, 1,200 reais (around 300 dollars). I am always pondering the benefits and costs. And I try to do that with my son as well. He wanted to buy an Ipad with his own money. Like it would take him more than 2 years to put together the needed money to buy an Ipad, so I told him to buy a Samsung tablet. He didn't want at first, because he wanted to buy an Ipad. And I showed him that they had similar features, and he would be able to buy it much faster. I told him he could wear my ipad from time to time, and then he decided to buy it and now he is using it everyday. I am not willing to pay more just because of the branding. I know that, as a branding professional, I should never say that, but as a consumer, I just want to make the better use of my money.

INTERVIEWER: Is there any specific product, service that you like to research about it? where your purchase decision is not so rational?

INTERVIEWEE: No, not really. I mean, some time ago, I used to think about buying a special car , like, moving to another sphere of consumption, but then I decided that it was not what I wanted to do anymore, it was not my priority.

INTERVIEWER: Was there anything that you like to search through in magazines.

INTERVIEWEE: Magazines? Wow, they are so dead right now, aren't they?

INTERVIEWER: sort of, but some years ago, didn't you like to read magazines?

INTERVIEWEE: Back then,? Yes, I used to like to read Elle, I remember that I liked to see the cosmetics, editorials, and see how they put together some clothes, that inspired me. Now with the bloggers, and instagrammers, social media it is not as well put together, as it was, and it is not appealing to me, I mean I don't waste my time looking at them now. These influencers always talk so much about the brands that are paying them, with this discourse, these influencers made it so banal, so worldly that I just lost interest. the show how people can have a life like theirs, but for me this is not attractive at all.

INTERVIEWER: Did you find other way to access this kind of content?

INTERVIEWEE: Which kind, the Elle Magazine style. If it would still be present?

INTERVIEWER: No, if you find it in another way, in a digital platform.

INTERVIEWEE: No, I didn't. i mean I see some things on Instagram, but they do not give me any intention to consume. It is not the same as I had with the magazine.

INTERVIEWER: Now let's talk about online. You said you search online everyday ,because of your work. Can you elaborate on that?

INTERVIEWEE: Well, in communication everything is online. we have to search for everything related to our work. for example, we are going to SPFW with a brand called Another Place. We searched about it online so we are sure about it. When I need to hire some professionals or agencies, we do all the search online. It is very important for our job to search online for information. It is like a valuable tool.

INTERVIEWER: I see, when you do these searches, do you always keep the focus? Or are there any detours?

INTERVIEWEE: It usually happens. Like, when we find a new brand, we start to search about it, out of focus. But I return to focus very quickly.

INTERVIEWER: You said that you like to buy things on sale online. Is there any type of product that you search online ?

INTERVIEWEE: I usually look for things related to work.

INTERVIEWER: Have you ever found anything online, that you did not expected before?

INTERVIEWEE: Yes, I have discovered several brands that I did not know, and we connected them to be part of the project. About my consumption, I came across the Zara website. As Zara is a brand I like to buy products at, when I heard they had released a website in Brazil, I accessed and was really impressed. It is not like a usual website, it is more like a magazine editorial, and you go through the images to see the products, in a different manner. It really caught my attention.

INTERVIEWER: Did you buy anything there?

INTERVIEWEE: No, not yet. Hahaha, I mean, not yet means that I am going to buy soon.

INTERVIEWER: While you were surfing on the web, looking for things, have you ever lost track of time?

INTERVIEWEE: No, not really. I have lost track of time working. Or playing games in my cell phone. They are very addictive.

INTERVIEWER: Besides fashion related things that you search for because of your work, is there any other topic that you like to access, search online?

INTERVIEWEE: My life is so hectic right now that I don't look for anything. Not even Netflix. I subscribe it, but I never watch it. I have to work, then take care of home, my son. When I am finished is about 11pm, and to relax I play a little on my cell phone or tablet. Sometimes I search on social media, just check what my friends are doing. More to relax my mind, to slow my mind.

INTERVIEWER: You said that you use the internet to help you choose for things you buy. Can you elaborate on that?

INTERVIEWEE: Let me think. The last big thing I bought was my laptop. I went online to see which were my options, with the characteristics I needed, what was there, what were the prices in the market. So I searched online to find everything I needed to know to decide on which I needed to buy, the technical characteristics I need to check before I go to the store and buy it. If you just go to the store, they will push you things, most times the salespeople do not know much of the characteristics, so before I go, I search everything online, so I am ready to make a good choice when I am in the store.

INTERVIEWER: So, you prepare yourself with the information online, is that it?

INTERVIEWEE: Yeah.

INTERVIEWER: Why didn't you buy online then?

INTERVIEWEE: I usually do a double search. Online and offline. I see the range I have in the offline stores. I have all the options I have online. If the offline store does not give me any advantage, I go home and buy online. I use the internet to buy better. To make better decisions.

INTERVIEWEE: Depending on the product, I need to go to the store and see, touch and feel the product. Furniture is one of these products. I need to go the store and feel it. I feel like home appliances, like refrigerators, it is not necessary. Clothes I really need to see them in stores. I rarely bought any clothes online that were right. I had tried twice at Hering, but I hated it. The color is different than what you expected, the fit is different. And I have to try on clothes, but I really need to go to the stores. So I never buy clothes online for myself.

INTERVIEWER: Do you buy clothes online for your son?

INTERVIEWEE: Rarely, I usually buy shoes online. I have bought but it is a rare occasion. I mostly buy in stores, like when I go there to buy something specific or if I am walking by the store, and see something I like, then I go and buy it. For me and for my son as well.

INTERVIEWER: What about groceries. Do You buy them online ?

INTERVIEWEE: Yeah, I have done that, already, and it was a great experience. It was during that strike and there was a threat of not having anything to buy in the supermarkets. I was out of town, and I went online and I conveniently bought my groceries in a local market. I set up the date to deliver, and it was fine.

INTERVIEWER: Did you buy online again, or was it the only time?

INTERVIEWEE: This was the only time. I like to go out to buy groceries. I know this is weird, and I am probably the only one who says that, but I like to go to the market, and buy groceries.

INTERVIEWER: Do you go by yourself?

INTERVIEWEE: Usually yes, or with my son. He likes to come by.

INTERVIEWER: What do you feel when you are there?

INTERVIEWEE: I don't know, I never thought about it. It is something I like. I don't know. When I go there, I wonder about what I can do. I love cooking, so it is a time when I am thinking about what I am going to prepare. Most people think it is a drag to go for grocery shopping but I really enjoy it, I don't know why. I just like it to be there, thinking about the possibilities.

INTERVIEWER: While you were searching for information for the brands you have to search for your professional activities, have you ever found anything you liked and bought it?

INTERVIEWEE: Bought it? No, never. I have came across things I like, and I have even included in the shopping cart. But I didn't buy it.

INTERVIEWER: Why?

INTERVIEWEE: I thought better and realize it I didn't need it. So I gave up.

INTERVIEWER: You mentioned that you used to go to the mall when you were single, and did not have kids, because it was therapeutical. What do you mean by that?

INTERVIEWEE: I liked walked around in the mall without any specific intention. Many people say that buying is therapeutical, but for me what was therapeutical was just walking around, relaxing your mind.

INTERVIEWER: so it was therapeutical because it relieved your stress?

INTERVIEWEE: I would say relax my mind, just walking, seeing things.

INTERVIEWER: Which is better to do that, the mall or the market?

INTERVIEWEE: Nowadays, the market. I really enjoy going to the market.

INTERVIEWER: What about online browsing, is there anything negative or positive about it? Do you recall something positive or negative?

INTERVIEWEE: when i am buying clothes, the most difficult part about online searching is to imagine the touch of the fabric, because there is usually no information about the composition of the fabric, so it is hard to imagine it. Other thing it is hard to buy cosmetics and perfume online because you can't smell and see the real color. I don't know how the technology will evolve, but I think it is very hard. I have bought a lisptick through a catalog once, and when I got it it was so different, I hated it. I have to give it away. Perfume also, I think it is very hard, only if you know the product before you buy iy. It would only work for repetitive buying, buying something for the 2nd or 3rd time.

INTERVIEWER: When you research too much about a product before you buy it, did the amount of search influenced your desire for the product? was it positive, negative, neutral.

INTERVIEWEE: I usually search for things because I need them, so I think it was neutral.

INTERVIEWER: Do you feel anxious when you have too many options to choose from?

INTERVIEWEE: Not really, no.

INTERVIEWER: Have you ever felt anxious when buying something.

INTERVIEWEE: Usually when it is some product that is more expensive, where I have to spend more money, like car, mobile phone.

INTERVIEWER: Do you feel anxious before, after or during the purchase decision.

INTERVIEWEE: I think before and after .Before because I am going to spend the money, and after because I have spent the money. haha

INTERVIEWER: Do you ever make additional searches about the product you bought to see if the price changed?

INTERVIEWEE: No, never. I avoid doing that. Because there is nothing you can do about it. Like when you buy a car, you search for a while, and you decide to buy it. I feel anxious during the whole process, specially after because you start to think, "wow, I bought this car". It is always a lot of money, so yeah, I feel super anxious about it. But I don't keep searching for it after I bought it.

INTERVIEWER: Have you ever bought something and found out later that you could have payed less?

INTERVIEWEE: Yeah it did, with clothes. I have bought it and the next week it was on sale.

INTERVIEWER: How did you feel about it?

INTERVIEWEE: I didn't regret it. What can you do? I moved on.

INTERVIEWER: Have you ever felt you have gained knowledge after searching about it online.

INTERVIEWEE: More professionally, I do. Now I feel like I am a specialist in cotton and fashion, my knowledge about it has really improved. I feel like there is always something to learn in all the websites I go to. Like, when I bought cell phones, I know lots of technical details, like, I know now that we cannot buy a cell phone with less than 8GB of memory, only the system would use half of that, so I learned that through searching.

INTERVIEWER: Do you ever pass this knowledge on to other people?

INTERVIEWEE: I do, I think it is important to help people, if I see someone is in need of an information, I go and help it.

INTERVIEWER: Is it more reactive or proactive?

INTERVIEWEE: More proactive I think, I try to help everytime I can.

Appendix 2

As Predicted registers

Experiment 1 – Article 3

As Predicted:"High purchase intention (x low) browsing x Intentional / Incidental" (#33779)

Created: 01/13/2020 07:40 AM (PT)

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1) Have any data been collected for this study already?

No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?

This is a 2 (COB Browsing / PrePurchase search) x 2 (Incidental x Intentional browsing). This experiment aims to verify if Browsing leads to more product knowledge, hedonic experience, positive perception of browsing activity than PrePurchase type of search, specially in the incidental condition, where browsing is not planned, it is unintentional.

3) Describe the key dependent variable(s) specifying how they will be measured.

product knowledge, hedonic perception of the browsing experience, losing track of time, interest in the activity, interest in the product category.

4) How many and which conditions will participants be assigned to?

Design:

2 (purchase intention: low (COB) vs. high (pre-purchase search)) x
2 (brand exposure: incidental vs. intentional)

Manipulation (scenarios using snickers as stimuli)

Condition 1: COB/incidental

Condition 2: COB/intentional

Condition 3: Pre-purchase Search/incidental

Condition 4: Pre-purchase Search/intentional

For each condition, about 60 respondents, 240 total.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

ANOVA, comparing means across scenarios. ANCOVA to verify possible covariates.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

Exclusion: incomplete, and failed in the attention check questions.

7) How many observations will be collected or what will determine sample size?

No need to justify decision, but be precise about exactly how the number will be determined.

60 per condition, 240 total.

8) Anything else you would like to pre-register?

(e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

We included some possible variables related to the emotions felt during the browsing activity, possibly showcasing differences in the emotions perception amongst the 4 different conditions.

Experiment 2 – Article 3

As Predicted: "Consumer Online Browsing experiment - managerial relevance" (#32256)

Created: 12/04/2019 10:09 AM (PT)

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1) Have any data been collected for this study already?

No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?

Consumer Online Browsing increases consumers' perception of product knowledge, and positively impacts on their purchase intention. Product Interest moderates the strength of this effect. The effect of flow will be present more in COB than in PrePurchase, only for cases where the duration of the navigation is longer than average.

3) Describe the key dependent variable(s) specifying how they will be measured.

Product knowledge - Subjective product knowledge scale (Park et al, 2003)

Purchase intention - 2 direct questions - how likely are you to buy the product you searched for now and in the next months.

Flow will be assessed through the use of dimensions MAA (merging actions and awareness), TT (transformation of time), and AE (autotelic experience) from Flow Scale proposed by Jackson & Noh (2011).

4) How many and which conditions will participants be assigned to?

One participant is randomly assigned to 1 of 4 possible conditions:

- 1) Consumer Online Browsing - product interest ON (respondents are asked to choose the type of product they are more interested in searching).
- 2) Consumer Online Browsing - product interest OFF (respondents are asked to choose the type of product they are least interested in searching).
- 3) PrePurchase (instead of browsing, consumers are asked to compare 2 alternatives) - product interest ON
- 4) PrePurchase - product interest OFF

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

ANOVA to compare means amongst the different scenarios. ANCOVA to test for moderators.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

Incomplete answers will be excluded. We included attention check question, so respondents who fail to respond to them will also be excluded.

7) How many observations will be collected or what will determine sample size?

No need to justify decision, but be precise about exactly how the number will be determined.

Original idea: run the experiment in 2 countries. In the US, 240 participants, 60 per cell, in Brazil, 400 participants, 100 per cell.

8) Anything else you would like to pre-register?

(e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

Nothing else to pre-register.

Experiment 3 – Article 3

As Predicted: "COB Managerial relevances with hedonic/utilitarian motivation" (#33606)

Created: 01/08/2020 01:14 PM (PT)

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1) Have any data been collected for this study already?

No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?

Consumer Online Browsing increases consumers' perception of product knowledge, and positively impacts on their purchase intention. The intention of the browsing activity mediates this effect. When browsing for hedonic purposed, the impact on product knowledge and purchase intention is higher. The effect of flow will be present more in COB/hedonic than in PrePurchase/utilitarian.

3) Describe the key dependent variable(s) specifying how they will be measured.

Product knowledge - Subjective product knowledge scale (Park et al, 2003)

Purchase intention - 2 direct questions - how likely are you to buy the product you searched for now and in the next months.

Flow will be assessed through the use of dimensions MAA (merging actions and awareness), TT (transformation of time), and AE (autotelic experience) from Flow Scale proposed by Jackson & Noh (2011).

4) How many and which conditions will participants be assigned to?

One participant is randomly assigned to 1 of 4 possible conditions:

- 1) Consumer Online Browsing - hedonic motivation: respondents are asked to browse for a title of a book to give as a gift to a friend that works with technology and loves reading, a book to read in their vacation.
- 2) Consumer Online Browsing - utilitarian motivation: respondents are asked to browse for a title of a book to give as a gift to a friend that works with technology and loves reading, a book that would help them in their career.
- 3) PrePurchase (instead of browsing, consumers are asked to compare 2 alternatives) - hedonic - respondents are asked to compare two novels to give to a friend that works with technology and loves reading, to read in their vacation.
- 4) PrePurchase - utilitarian - respondents are asked to compare two specific business titles to give to a friend that works with technology and loves reading, to read to improve in their career.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

ANOVA to compare means amongst the different scenarios. ANCOVA to test for moderators.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

Incomplete answers will be excluded. We included attention check question, so respondents who fail to respond to them will also be excluded.

7) How many observations will be collected or what will determine sample size?

No need to justify decision, but be precise about exactly how the number will be determined.

about 400 (100 per cell)

8) Anything else you would like to pre-register?

(e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

Nothing else to pre-register.