

UNIVERSIDADE FEDERAL DO RIO GRANDE DO SUL
ESCOLA DE ADMINISTRAÇÃO
PROGRAMA DE PÓS-GRADUAÇÃO EM ADMINISTRAÇÃO
MESTRADO ACADÊMICO EM ADMINISTRAÇÃO

Maura Ferreira Rodrigues

**THE MORE YOU KNOW THE MORE YOU SEARCH: POST-DECISION
INFORMATION SEARCH AND THE EFFECT OF PRIOR KNOWLEDGE**

Porto Alegre

2016

Maura Ferreira Rodrigues

**THE MORE YOU KNOW THE MORE YOU SEARCH: POST-DECISION
INFORMATION SEARCH AND THE EFFECT OF PRIOR KNOWLEDGE**

Dissertação apresentada ao Programa de Pós-Graduação em Administração da Universidade Federal do Rio Grande do Sul, como requisito parcial à obtenção do grau de Mestre em Administração.

Orientadora: Profa. Dra. Cristiane Pizzutti dos Santos

Porto Alegre

2016

CIP - Catalogação na Publicação

Ferreira , Maura
THE MORE YOU KNOW THE MORE YOU SEARCH: POST-
DECISION INFORMATION SEARCH AND THE EFFECT OF PRIOR
KNOWLEDGE / Maura Ferreira . -- 2016.
66 f.

Orientadora: Cristiane Pizzutti dos Santos.

Dissertação (Mestrado) -- Universidade Federal do
Rio Grande do Sul, Escola de Administração, Programa
de Pós-Graduação em Administração, Porto Alegre, BR-RS,
2016.

1. Post-decision information search. 2. Prior
knowledge. 3. Maximizing tendencies. 4. Cognitive
dissonance. 5. Uncertainty. I. Pizzutti dos Santos,
Cristiane, orient. II. Título.

Maura Ferreira Rodrigues

**THE MORE YOU KNOW THE MORE YOU SEARCH: POST-DECISION
INFORMATION SEARCH AND THE EFFECT OF PRIOR KNOWLEDGE**

Dissertação apresentada ao Programa de Pós-Graduação em Administração da Universidade Federal do Rio Grande do Sul, como requisito parcial à obtenção do grau de Mestre em Administração.

Aprovado em _____ de _____ de _____.

BANCA EXAMINADORA

Prof. Dr. Danny Pimentel Claro – INSPER

Prof. Dr. Luiz Antonio Slongo – Universidade Federal do Rio Grande do Sul

Prof. Dr. Vinícius Brei – Universidade Federal do Rio Grande do Sul

Profa. Dra. Cristiane Pizzutti do Santos – Universidade Federal do Rio Grande do Sul

Porto Alegre

2016

AGRADECIMENTOS

Na vida, mesmo que todo, ou maior parte do esforço, tenha sido nosso, em algum momento, mesmo que por uma fração de minutos, somos confortados por uma palavra de incentivo de algum amigo, ou até mesmo a sua ajuda na solução de uma questão que, apenas pela a nossa perspectiva, não conseguiríamos resolver. Tom Jobim, já nos alertava em uma de suas canções: “É impossível ser feliz sozinho”. E aqui, ousou expor minha interpretação sobre tal trecho: podemos sim viver sozinhos e até mesmo estarmos satisfeitos, mas se recordarmos os momentos mais felizes vividos, certamente alguém estava ao nosso lado. Portanto, é possível que Tom esteja certo. A trajetória que percorri até aqui, não foi propriamente uma trajetória “feliz” em sua totalidade, mas sim repleta de questionamentos, desconstruções e autoconhecimento, elementos sem os quais um pesquisador não exerce a sua arte. No entanto, esses dois anos foram mais interessantes e felizes graças a algumas pessoas.

Primeiramente, agradeço à minha mãe, alguém que admiro imensamente, por sua coragem de exercer da melhor forma possível dois difíceis papéis: o de mãe e o de pai. Também preciso agradecer a minha dinda por todo carinho, preocupação e incentivo. Sem vocês duas, tudo faria menos sentido.

Agradeço também ao meu parceiro de pesquisa e vida. Tito, é um imenso prazer dividir momentos contigo (“*I am gorgeous!*”, “*Yes, you are!*”). Obrigada por toda a ajuda e troca de ideias. Ainda, esses dois anos foram mais “lúdicos” graças às amigas Fernanda, Ana, Angélica, Laís, Luiza. Meninas, obrigada pelas risadas, sessões terapia, e por me mostrarem que a vida transpõe a Academia. O mestrado passa, mas vocês continuam.

Por fim, e não menos importante, agradeço a minha orientadora pela confiança e por me aceitar como sua orientanda. Cris, obrigada pelas conversas e palavras de conforto. Foi um imenso prazer ser sua aluna e trabalhar com você. Agradeço também aos professores da área de Marketing pelo conhecimento compartilhado. Mas preciso fazer um agradecimento em especial aos professores mais antigos do Programa, alguns dos quais foram, desde a graduação, essenciais para a minha escolha: professores Carlos A. Vargas Rossi, Fernando Bins Luce e Luiz A. Slongo. Sinto-me grata por ter convivido com vocês.

RESUMO

O comportamento de busca de informação é conhecido por anteceder decisões não triviais e também por ocorrer após a tomada de decisão, entretanto poucos estudos focam na busca por informação nesse estágio do processo. Pesquisadores têm investigado o conhecimento prévio tido pelo indivíduo como um importante preditor da busca por informação antes da tomada de decisão. No entanto, após a decisão, a influência do conhecimento prévio na busca por informação tem sido negligenciada. Considerando que o conhecimento sobre o produto é um importante componente do processo decisório do consumidor, e tal conhecimento permanece na memória do indivíduo mesmo após ele ter feito, por exemplo, uma compra, investigar o efeito do conhecimento prévio, antes da decisão, na quantidade de informação buscada pelo consumidor após a tomada de decisão endereça uma importante lacuna na literatura sobre o comportamento de busca de informação do consumidor. Esse é o principal motivador para o presente trabalho. Adicionalmente, essa pesquisa investiga a tendência à maximização como um possível moderador da relação entre conhecimento prévio e a busca de informação após a tomada de decisão. Assim, três estudos são reportados (um experimento e duas *surveys*). Ao longo desses estudos, o efeito simples proposto é investigado em dois estágios da experiência pós-decisão: pre- e pós-uso. Em essência, os resultados indicam que o conhecimento do consumidor (antes da tomada de decisão) aumenta a busca de informação após a decisão. Esse efeito é potencializado para consumidores com mais tendência à maximização. O papel da dissonância cognitiva também foi explorado na relação entre conhecimento prévio e busca de informação após a decisão. Por fim, a incerteza com a escolha foi apresentada como uma possível variável supressora do efeito de conhecimento prévio na variável dependente investigada.

Palavras-chave: busca de informação pós-decisão, conhecimento prévio do consumidor, tendência à maximização, dissonância cognitiva, incerteza.

ABSTRACT

Information search behavior is known to antecede non-trivial decisions, but it may also occur in the post-decision timespan. Researchers have studied individuals' prior knowledge as a predictor of information sought prior to the decision. Only a few studies have focused on post-decision information seeking, and these studies did not explore the influence of prior knowledge (i.e., decision-related knowledge accumulate prior to the event of the final decision). Because product knowledge is an important component in consumers' decision-processes and it remains within individuals' long-term memory after they made the purchase decision, investigating the effect of pre-decision product knowledge on post-decision amounts of information sought might fill an important gap in consumer information-search-behavior literature. This was the main motivation for the current research. Additionally, this work proposes that maximizing tendencies may moderate the relationship between knowledge and post-decision information search. The thesis reports three studies varying in their data collection approach (experimental and survey). Across these studies, the proposed effect was investigated as occurring in two stages of consumers' post-decision experience: pre-use and post-use. In essence, results indicate that the consumers' knowledge increases information search during the post-purchase timespan. This effect is stronger among consumers with high maximizing tendencies (individuals that feel the need to maximize their decisions). I also explored the role of cognitive dissonance as a bridging factor to the relationship between prior knowledge and information seeking. Lastly, choice-uncertainty was found to suppress effects of prior knowledge.

Keywords: post-decision information search, prior knowledge, maximizing tendencies, cognitive dissonance, uncertainty

TABLE OF CONTENTS

1. INTRODUCTION	10
1.1 RESEARCH OVERVIEW.....	13
2. THEORETICAL BACKGROUND	15
2.1 PRIOR KNOWLEDGE: CONCEPT AND MEASURES	15
2.2 INFORMATION SEEKING AND THE DECISION-MAKING PROCESS	16
2.3 PRIOR KNOWLEDGE AND INFORMATION SEEKING	18
3. STUDY 1: THE INVESTIGATION OF THE SIMPLE EFFECT	20
3.1 MANIPULATION.....	20
3.2 MEASURES	21
3.3 SAMPLE.....	21
3.4 RESULTS	22
3.5 DISCUSSION	23
4. STUDY 2: THE ROLES OF MAXIMIZING TENDENCIES AND COGNITIVE DISSONANCE	25
4.1 PROCEDURE.....	28
4.2 MEASURES	29
4.3 SAMPLE.....	30
4.4 RESULTS	30
4.5 DISCUSSION	34
5. STUDY 3: A POST-USAGE INVESTIGATION	37
5.1 PROCEDURE.....	37
5.2 MEASURES	37
5.3 SAMPLE.....	38
5.4 RESULTS	38
5.5 DISCUSSION	42
6. THE ROLE OF COGNITIVE DISSONANCE AND CHOICE-UNCERTAINTY	44
7. GENERAL DISCUSSION	48
8. SUMMARY	51
9. RESEARCH LIMITATIONS	53
10. APPENDIX	55
10.1 APPENDIX STUDY 1	55
10.2 APPENDIX OF SCALES: STUDY 1	57
10.3 APPENDIX OF SCALES: STUDY 2	58

10.4 APPENDIX OF SCALES: STUDY 3	60
11. REFERENCES	62

1. INTRODUCTION

Information search behavior has aroused curiosity of researchers in many fields, including Psychology, Education, Information System, Investment Behavior, and Consumer Behavior (PETTY; CACIOPPO; KAO, 1984; BETMANN; LUCE; PAYNE, 1998; WILSON, 2000a, 2006b; GRANT; CLAREKE; KYRIAZIS, 2007). Prior research has mostly focused on issues regarding how people seek and use information and factors that inhibit/encourage information seeking (WILSON, 1997; FOSTER, 2004; PETTIGREW; FIDEL; BRUCE, 2001). Because we experience increasing access to large amounts of information thanks to ongoing technological developments, studies on information search behavior are growing in importance for fields like consumer research and marketing (GUO, 2001; WILSON, 2006).

We are constantly exposed to different sources of information: we read newspapers, browse websites and social media, talk to friends/relatives. This exposure is often deliberate, since we usually choose our sources of external information to support the decisions we make in occasions such as planning a holiday trip or buying a gift for a friend. For each decision we make, we will probably seek some information before making our final choice.

In consumers' decision-making process, the search of information is a primary driver. Particularly when a) the purchase is personally important; b) information is easy to acquire; and c) there is an inherent necessity to learn more about the available options (NEWMAN; STAELIN, 1972; BETTMAN; LUCE; PAYNE, 1998; SCHWARTZ, 2004). Although consumer information-seeking behavior during the initial stages of the decision-making process (i.e., before the final decision) has been extensively studied in prior research (PUNJ; STAELIN, 1983; MOORTHY; RATCHFORD; TALUKDAR, 1997; GRANT; CLARKE; KYRIAZIS, 2007), evidence suggests that decision-makers still engage in information search even when they have already made their choice (EHRlich et al., 1957; SHANI; ZEELENBERG, 2006).

If information seeking antecedes nontrivial decisions as a way of aiding the decision-maker to choose a satisfactory option, post-decision information seeking might happen with the aim of confirming choice accuracy (DONELLY; IVANCEVICH, 1970; SHANI; ZEELENBERG, 2006). In marketing contexts, the information to which consumers are exposed after the decision often helps them supporting the validity of the decision (BETTMAN; JOHNSON; PAYNE, 1991), diminishing back-out behaviors (DONELLY; IVANCEVICH, 1970), decreasing regret (SHANI; ZEELENBERG, 2006), and increasing satisfaction (SHANI; ZEELENBERG, 2006).

Nevertheless, few studies have addressed information seeking with this perspective. One exception is the work of Donnelly and Ivancevich (1970), who found that when a salesperson gives car buyers new information to reinforce the advantages of their choice after they completed the purchase, but while they had not yet received the car, back-out behavior (i.e., canceling the purchase) decreases. Additionally, Shani and Zeelenberg (2006) explored the relationship between regret toward the decision and post-decision information seeking. They found that the experience of regret (but not its anticipation) increases post-decision information seeking.

A few variables have been used to explain why consumers search information during both pre- and post-decision timespans. Before the decision, prior knowledge has been considered a key driver that motivates consumers' information search (BRUCKS, 1985; GUO, 2001; CARLSON et al., 2009). Researchers have found that prior knowledge influences the amounts of information sought before making the decision, but results were mixed (positive as well negative effects) across studies. Authors who found positive effects of prior knowledge argue that knowledge helps individuals processing new information (JOHNSON; RUSSO; 1984; BRUCKS, 1985; CARLSON et al., 2009). Conversely, researchers who found negative effects (e.g., NEWMAN; STAELIN, 1972; MOORE; LEHMANN, 1980) argue that individuals with high knowledge "perform more efficient (thus abbreviate) information searches" (BRUCKS, 1985, p.3). On the other hand, variables such as cognitive dissonance and regret have been rather used to explain post-decision information search behavior (EHRlich et al., 1957; DONELLY; IVANCEVICH, 1970, SHANI; ZEELENBERG, 2006). Researchers state that cognitive dissonance affects post-decision information seeking because individuals search information to minimize the dissonance they are experiencing (DONELLY; IVANCEVICH, 1970, JONES, 2002). It has also been suggested that people carry out post-decision information search aiming to decrease feelings of regret (SHANI; ZEELENBERG, 2006).

Despite the fact that several studies have investigated the effect of prior knowledge on the amounts of information sought prior to the final decision, there is a surprising absence of empirical research exploring this effect during the post-decision stage of consumers' experience. Does prior knowledge truly affect the amounts of information sought after consumers' final choice?

I defend that, regardless of the existence of cognitive dissonance or regret after the decision – which may affect the amounts of information sought as well –, it is possible that customers' prior knowledge also exerts some influence on the amounts of information sought

after the purchase. The rationale supporting this prediction builds on the following ideas: it is a well-known fact that consumers' decision process does not end at the purchase act, but it extends into the post-purchase experience (SHETH; MITTAL; NEWMAN, 1999); and, in this phase, individuals can, and do, search for information about the decision they already made (EHRlich et al., 1957; IVANCEVICH, 1970; SHANI; ZEELenberg, 2006).

In addition, the initial information we access to support decision-making pertains to internal memory – this information can be promptly accessed and we tend to deem it reliable. When this information is not sufficient, or is not available for some reason, we turn to external sources (e.g., website, friends, ads - SUJAN, 1985; PARK; MOTHERSBAUGH; FEICK, 1994; WILSON, 2000). However, just as internal information might not be satisfactory for decision-making, it might not be satisfactory to develop evaluations of the decision in the post-purchase phase of consumers' experience as well. Moreover, unlike cognitive dissonance and regret, which arise during the post-decision experience, prior knowledge is a cognitive feature that exists in the pre-purchase stages and stays with individuals across the other stages, including the post-purchase experience.

I propose to study information seeking as part of the post-decision experience of consumers and to take a perspective that differs from that of prior research (EHRlich et al., 1957; DONELLY; IVANCEVICH, 1970; SHANI; ZEELenberg, 2006). My aim is to investigate whether a variable that affects the amounts of information sought prior to the final decision (namely, individual's prior knowledge) helps us better understand information search after the final decision. My primary objective is to explore the effect of prior knowledge on the amounts of information that consumers seek in the post-decision timespan, since there are no empirical evidences of this relationship in this context. Furthermore, since decision-making theories point out that personality components may affect information search behavior (GRANT; CLARKE; KYRIAZIS, 2007), I propose to investigate if maximizing tendencies moderate the effect of prior knowledge on post-decision information search. Despite the fact that evidences have indicated that the maximizing tendency affects the amounts of information sought in the decision process, to the best of my knowledge, empirical studies have not yet investigated this effect when information search occurs the post-purchase context (IYENGAR; WELLS; SCHWARTZ, 2006). Generally, few studies have explored the influence of the maximizing tendency in post-decision behaviors. One exception is the study of Ma and Roese (2014), who showed that the maximizing mind-set “increases the likelihood to returning and

switching products” (p.71). Thus, evidence suggests that post-decision behaviors may be different across maximizing levels.

The contribution of this study is threefold. First, the present research contributes to prior knowledge theory by investigating product knowledge in a decision stage that has been underexplored: after the final purchase decision. Additionally, I explored the interaction between prior knowledge and individual maximizing tendency and its effect on the amounts of information sought. This interaction has never been scrutinized. Finally, and most importantly, we explore the post-decision information search behavior from perspective that differs from previous studies (EHRLICH et al., 1957; DONELLY; IVANCEVICH, 1970; SHANI; ZEELENBERG, 2006). Some important evidences regarding the roles of cognitive dissonance and of choice-uncertainty are presented in this sense too.

For marketers, this work helps shedding some light on a class of behavior (namely, post-decision information seeking) that may exert influence on variables that are valuable for practitioners, such as consumer satisfaction, repurchase intention, back-out behavior, and word-of-mouth. Post-decision information search is a phenomenon that has been largely neglected in research, even though information seeking has become an easy task and consumers can now access large amounts of information whenever they wish (WILSON, 2006).

1.1 RESEARCH OVERVIEW

The main purpose of this work was to investigate if a relationship between individuals’ prior product knowledge and the amounts of information sought occurs in post-purchase scenarios. Thus, the primary goal was to investigate if the knowledge held before making the final decision affects the extent to which consumers continue to seek information after the decision. Secondly, I explored the effect of maximization tendencies, a personality trait that is strongly associated with information search behavior, on this relationship. Additionally, I investigated if cognitive dissonance might mediate a model with this relationship and if individuals’ satisfaction, which gives diminishes regret feelings, may influence the post-decision amounts of information sought.

To address these objectives, I conducted three studies varying in their approaches. In Study 1, I focused on exploring the existence of the main, simple effect proposed in this work using an experimental approach. Subsequently, I present Study 2 and Study 3 (surveys), in which the objectives were to subject the main effect to external validity, to explore participants’ maximizing tendencies as a moderator, and to explore how cognitive dissonance might integrate

the model. In both these surveys, real purchases by the participants were used. Additionally, data from Study 2 was re-examined after all the studies had been worked out to explore a potential suppressing interference of choice-uncertainty.

2. THEORETICAL BACKGROUND

The present section introduces a theoretical review surrounding consumer knowledge and information search.

2.1 PRIOR KNOWLEDGE: CONCEPT AND MEASURES

If one googles the word “knowledge”, one will probably find that “knowledge is a set of information, skills, and facts acquired by someone through education and/or experience during her/his life”. Therefore, one could conclude that knowledge provides people with awareness or familiarity about a certain issue. For example, if the reader actually searched for the word “knowledge”, now the reader holds a (potentially) new piece of information about the concept of knowledge that corresponds to some knowledge of this issue in the reader’s memory.

During life, we need to make several decisions. As consequence, we accumulate some expertise on making choices. Across different areas, prior knowledge of the decision-maker attracts researchers’ attention (BETTMAN; PARK 1980; BRUCKS, 1985; SHANE, 2000). The concept of prior knowledge converges with the concept of knowledge, but the addition of the word “prior” establishes that we are referring to the set of knowledge held prior to a particular moment. In this work, I comply with Brucks’ (1985) approach to ‘prior knowledge’, which states that prior knowledge consists in information stored in individuals’ memories. This information may originate, for example, from previous experiences as well as from voluntary information search using sources such as the internet, friends, ads, and others.

Prior knowledge can be organized as two forms of knowledge: subjective and objective (BRUCKS, 1985). Subjective knowledge refers to a process in which an individual scans her/his memory looking for cues that help evaluating her/his level of knowledge concerning a certain domain (PARK, MOTHERSBAUGH; FEICK, 1994). This form of knowledge reflects how knowledgeable an individual think she/he is about a specific topic (HADAR; SOOD; FOX, 2013) and is built on the information an individual thinks she/he stores in memory. For instance, in the context of a product class, it would reflect how much one thinks one knows in terms of brand names, usage procedures, product features, and other factual elements (BRUCKS, 1985; PARK, MOTHERSBAUGH; FEICK, 1994; CARLSON et al., 2009). Subjective knowledge often relates to the individual’s consumption experiences in that more experienced consumers tend to be more confident about their knowledge (PARK, MOTHERSBAUGH; FEICK, 1994).

It is usually measured with items that ask individuals to report the knowledge they feel they hold about a focal topic (HADAR; SOOD; FOX, 2013).

Objective knowledge is defined as what is truly stored in the individual's memory, which may not be perfectly correlated with how much they think they know. This knowledge depends on the consumer's actual ability to evaluate and use a product (BRUCKS, 1985; ALBA; HUTCHINSON, 2000; CARLSON et al., 2009). When measuring objective knowledge, researchers might test subjects in focal topic. Alternatively, when trying to avoid confounds produced by objective knowledge, researchers try to keep it constant to all participants (BRUCKS, 1985).

Despite the fact that a number of researchers has used subjective knowledge measures in their studies (BRUCKS, 1985; MOORMAN, et al., 2004; CARLSON et al., 2009; HADAR; SOOD; FOX, 2013), there is some concern about their effectiveness as a proxy for actual, objective knowledge. Particularly, some authors (e.g., BRUCKS, 1985; CARLSON et al., 2009) suggest that there is an influence of individuals' self-confidence on subjective knowledge measures because individuals may overestimate (or underestimate) their knowledge depending on their confidence. However, some critics argue that more often than not self-reported knowledge approximates to actual knowledge (RADECKI; JACCARD, 1995). Carlson et al. (2009) demonstrated through a meta-analysis that subjective and objective knowledge are significantly and positively correlated. An important issue for studies that analyze the effect of prior knowledge and the amounts of information sought is knowledge calibration, which reflects the agreement between objective knowledge and self-assessed knowledge (ALBA; HUTCHINSON, 2000; CARLSON et al., 2009). In light of this discussion, I conducted studies with both approaches.

2.2 INFORMATION SEEKING AND THE DECISION-MAKING PROCESS

Information seeking consists in “purposive seeking for information as a consequence of a need to satisfy some goal.” (WILSON, 2000, p.49). Information search is widely studied part of the initial stage of consumers' decision-making process. During the information search stage, consumers actively acquire information that should help making a satisfactory choice (SCHMIDT; SPRENG, 1996). Furthermore, some consumers are constantly searching for information of product/services, even when they only plan to make a related purchase in a distant future. Because of this, some authors suggest that understanding consumer behavior regarding information search is important for the purposes of planning effective marketing

communication. This is coherent for the perspective that, in stages wherein consumers search for information, marketers are faced with the opportunity to influence their decisions and product/service evaluations (SCHMIDT; SPRENG, 1996).

Individuals can gather information both externally and internally. An individual can access information internally (i.e., from their memory), but might do it externally (e.g., from ads, websites, the memory of others) as recourse in case the desired information is unavailable inside the memory or she/he is unable to recall it (SCHMIDT; SPRENG, 1996; WILSON, 2006). In the present manuscript, consumer information seeking refers to information actively searched by individuals in external sources, as in mainstream decision-making research (see NELSON, 1970; BETTMAN; LUCE; PAYNE, 1998; SCHMIDT; SPRENG, 1996).

Despite the fact that the most studies have explored information search that occurs prior to the final decision (BLOCH; SHERRELL; RIDGWAY, 1986; BETTMAN; LUCE; PAYNE, 1998), there are evidences that consumers continue to seek information after their choice is settled. Prior research suggests that this behavior may arise to help consumers support their decisions and to “[reassure] the buyer that a wise purchase decision has been made” (DONELLY; IVANCEVICH, 1970, p. 399).

Ehrlich and colleagues (1957) found that even in the post-decision timespan, including the post-usage stage, consumers sought information aiming to confirm their choices. The authors argumentatively explained this behavior building on cognitive dissonance theory. Their perspective assumed that consumers sought information after making a decision to minimize their experience of dissonance – which occurs when the experienced reality does not confirm the expectation one had about it before it took place, as stated by Festinger (1964). Considering that information search also happens before a final decision is settled – and it might be motivated by consumers’ prior knowledge (BURCKS, 1985) –, it is possible that information search during the post-purchase timespan might be at least partially explained by factors that affect search before the decision, such as prior knowledge.

Given that consumers’ prior knowledge may predict information search during the pre-purchase phase of the consumer experience, it may affect the amounts of information sought afterwards as well (this proposition will be better explain in another part of this thesis). Technological changes, such as access to the internet and new communication media, have increased the amounts of information consumers can access when they need to make a decision, and, likewise, all this information remains available after they made their final choice (ALBA, 1996; BETTMAN; LUCE; PAYNE, 1998; WILSON, 2000a, 2006b).

2.3 PRIOR KNOWLEDGE AND INFORMATION SEEKING

Product knowledge is considered a key concept in information processing research (RAJU; LONIAL; MANGOLD, 1995). A traditional research stream has explored the effects of consumers' prior knowledge on the amounts of information sought during decision-making (ALBA, 1980; BRUCKS, 1985; ALBA; HUTCHINSON, 2000; HADAR; SOOD; FOX, 2013). Investigating this relationship is important to understand a crucial aspect of consumer decision-making, which may influence the effectiveness of marketing strategies and consumers' final choice: information search behavior (BETMANN; LUCE; PAYNE, 1990; GUO 2000).

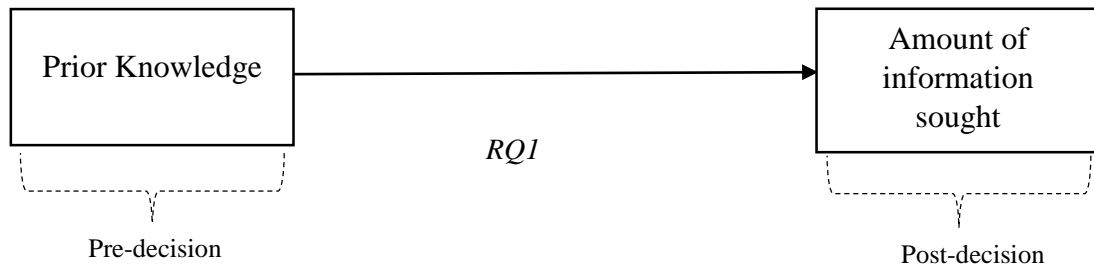
Researchers have found positive as well as negative relationships between prior knowledge and information search (NEWMAN; STAELIN, 1972; MOORE; LEHMAN, 1980; JHONSON; RUSSO, 1984; BRUCKS, 1985). Studies point out that positive effects occur because individuals with considerably high prior knowledge perceive the processing of new information an easier task (PUNJ; STAELIN, 1983; CARLSON et al., 2009). Consequently, they may formulate more questions related to the focal domain and search for more information in order to answer their own questions. Furthermore, knowledge helps decision-makers to better appraise answers to questions and decreases the cognitive cost of processing new information – i.e., high levels of knowledge increase the benefits of new information (BRUCKS, 1985).

In contrast, researchers who found negative effects justify their results arguing that experienced individuals know more about the attributes of the various options available, thus, they do not need to acquire much external information (MOORE; LEHMANN, 1980). A second explanation to these results assumes that individuals with high prior knowledge perform the search more efficiently because they discern the attributes which are useful while choosing between brands more easily. Thus, they quickly identify an inferior alternative and eliminate it. In this case, decision-makers maximize the time of the search (MOORE; LEHMANN, 1980; BRUCKS, 1985). Although Bettman and Park (1980) explained this apparent contradiction (the existence of negative as well as positive effects of prior knowledge on information search) describing the phenomenon as an inverted U-shaped relationship, authors have found significant linear effects on both directions in prior inquiry (KIEL; LAYTON, 1983; BRUCKS, 1985; SIRINIVASAN; RATCHFORD, 1991).

Considering the exposition above, I propose to address the following research question (*RQ1*): *Does consumers' prior knowledge (PK¹) influence the amounts of information that consumers seek (AIS) after they made their final decision?*

Given the absence of references for inferences about the relationship between knowledge and post-decision information sought and considering that prior research on the relationship between knowledge and pre-purchase information search leads to ambiguous conclusions, I chose to avoid making any prediction regarding the direction of the effect I speculate in *RQ1*. Figure 1 represents the relationship I am out to test as I address this question.

Figure 1 - The effect of PK on post-decision AIS: the conceptual model



Source: author (2016).

¹ Here I do not make a distinction between prior knowledge residing in individuals' memory before the decision process and prior knowledge acquired throughout the decision process (as in ALBA, 1980; BRUCKS, 1985; HADAR; SOOD; FOX, 2013). For the purposes of the current research, it is only important to stress that prior knowledge refers to knowledge held before the decision (BRUCKS, 1985). In other words, prior knowledge refers to the working knowledge stored in memory before the final decision.

3. STUDY 1: THE INVESTIGATION OF THE SIMPLE EFFECT

The main purpose of this study was to start addressing *RQ1*. I carried out a single factor experiment with data collected on Amazon Mechanical Turk. This study features a manipulation for decision-makers' objective knowledge (independent variable), while AIS (dependent variable) was measured using time spent in a post-decision information search task.

3.1 MANIPULATION

In this experiment, I manipulated participants' objective knowledge. Condition assignment (absence vs presence of objective prior knowledge) was used for the PK measure. Participants were told that during the task they would choose a brain-game and, as an additional reward for taking part in the study, they would win a password to access the game of their choice (and no other games) on a brain-games website for free access during an entire month. All available options were games developed to improve reasoning and memory: Towers of Hanoi, Rotation Game, and Logic Puzzles. This deception served as a motivation for the game-choosing component of the experiment. I opted to present unusual games to avoid confounds due to participants understanding of the games before taking part on the study. For this reasons, popular games, such as crosswords, were not among the available options.

Participants were randomly assigned to one of two conditions (absence vs presence of PK). While being presented to the list of games to choose from, the 'absence of PK' group received only the names of the games and no other information about them, whereas the 'presence of PK' group received an informative text about each game along with their names and a representative image. Participants chose a game from the list to gain one month of free access. Full instructions and explanations used in the experiment are provided in the appendix of Study 1. It is important to stress that by providing participants with (or with no) information about the games – as opposed to asking participants to report how much they knew about them –, I generated different levels of objective PK. Whether participants had any level of familiarity with the games before the induction in the experiment was solved by means of random assignment and by controlling results for participants' level of experience with the games.

With the approach used in this experiment, I was able to better control the information participants could access to make their final choices. To control for knowledge accumulated before the experiment, participants reported their experience with the game options we presented (“*I am experienced with the game options I was presented*”, using a seven-point scale,

where 1 = *strongly disagree*, and 7 = *strongly agree*). As expected, participants' prior experience with the games was low ($M = 3.09$, $SD = 1.631$) and significantly below the midpoint of the scale, $t(69) = 4.69$, $p < .001$. Additionally, participants reported their experience with the game they chose ("*I am experienced with the game I chose*", using a scale of seven points, being 1 = *strongly disagree*, and 7 = *strongly agree*). Participants did not have much experience with the game they chose ($M = 2.96$, $SD = 1.876$), with the mean for this measure being significantly below the midpoint of the scale as well, $t(69) = 4.65$, $p < .001$.

At the end of the procedure, participants were all debriefed about the password to the games website.

3.2 MEASURES

Dependent variable measure: After making the decision (i.e., choosing a game for themselves), participants were asked to search online for information about the games from the list as much as they would like to. I measured the time each participant spent searching for information for a proxy of AIS. To make sure participants would search for information related to the game decision during this activity, I asked them to paste the URLs they accessed during the activity in an appropriate space.

Covariate measure: In addition to experience with the games (explained above), I collected data for involvement with the decision for a covariate. I used two adapted items from Mittal's (1989) scale (1 = "*I strongly disagree*"; 7 = "*I strongly agree*"), $r = .722$, $p < .01$.

3.3 SAMPLE

Eighty-three Amazon Mechanical Turk workers were recruited, and spent around 14 minutes (average) to complete the task. They received a payment of \$ 0.40. For filtering purposes, I asked participants to report the extent to which they rushed into the information search activity to finish the task quickly ("*I did my online research as fast as I could to get over with this task as quick as possible*," 1 = "*I strongly disagree*", 7 = "*I strongly agree*"). Individuals who checked "7" to this item were filtered out (seven cases). Moreover, an attention check item was also used as a filter ("*How important was this choice for you? Please ignore this question and go to the item below*") and six cases were removed. Thus, 13 participants

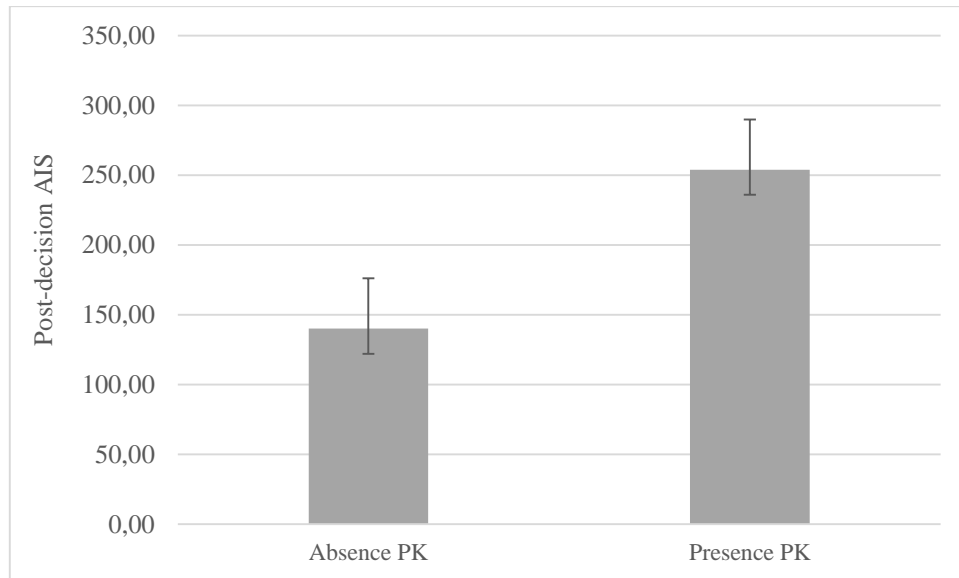
were eliminated from the analysis. The final sample consisted of 70 MTurk (42 females; $M_{age} = 37.56$).

3.4 RESULTS

To run the analysis, the IBM SPSS 21 Statistics software was used. The first test conducted was an independent-sample t-test to confirm if the manipulation worked as expected. The manipulation check was measured with a single item (*"The information about the games provided to make my game choice was sufficient to make a decision"*, 1 = *"I strongly disagree"*; 7 = *"I strongly agree"*). I expected participants allocated in the 'absence of PK' group to report lower levels of perceived information sufficiency. 'Absence of PK' participants indeed reported having a greater sensation of information insufficiency while making the game choice ($N = 34$, $M = 4.53$, $SD = 1.813$) than 'presence of PK' participants ($N = 36$, $M = 5.50$, $SD = 1.648$), $t(66) = -2.340$, $p < .05$. I also conducted an ANCOVA to test if the effect of the experimental condition would hold when controlling for prior experience with the games of the list and prior experience with the chosen game. Results indicated that the effect of the experimental condition remained significant whereas the potential covariates did not affect information sufficiency, $F(1, 66) = .506$, $n.s$ (experience with the games in the list) and $F(1, 66) = .711$, $n.s$ (experience with the chosen game). Thus, it may be deemed unlikely that participants' prior experience (as in before participating in the study) exerted any influence in the way the information provided was taken in as support for the decision process

Then, I turned my attention to the relationship focused in *RQ1*. A t-test showed that individuals assigned to the 'presence of PK' group ($M = 253.907$ seconds, $SD = 107.108$ seconds) spent more time searching for information than individuals assigned to the absence of PK group ($M = 140.106$ seconds, $SD = 235.200$), $t(68) = 2.579$, $p < .05$, and a medium effect size ($d = .62$) – Figure 2. A complementary ANCOVA showed that the effect is resilient to controlling for participants' experience with the game. More specifically, the item in which participants reported their experience with the options available was nonsignificant, $F(1, 66) = .326$, $n.s$ as well as the item in which they reported their experience with the chosen game, $F(1, 66) = .013$, $n.s$. An ANCOVA also tested the influence of involvement, which did not exert any effect, $F(1, 67) = .013$, $n.s$.

Figure 2 - Graphic bar with means per condition (absence of PK and presence of PK)



Errors bars represent ± 1 SEM
Source: author (2016).

3.5 DISCUSSION

This study suggests that even after a final decision was made (and could not be changed), individuals exposed to PK – as objectively indicated by the presence of product information provided by the experimenter – dedicated more time to search for additional information than individuals who were not exposed to PK (i.e. absence of PK). To what concerns *RQ1* (*Does consumers' prior knowledge influence the amounts of information that consumers seek after they have made their final choice?*), this finding is in tune with prior research on prior knowledge that suggests that the greater the knowledge, the more the individual carries out information search acts. The positive relationship between PK and AIS (hereby measured with time spent searching) might occur because individuals with knowledge about the focal domain can formulate more questions about a topic and can process new information employing less effort to do so (BRUCKS, 1985). In sum, the study presented evidences that the more knowledge the decision-maker holds, the more information she/he will search, even after the choice had been made and cannot be withdrawn.

However, it is important to account that the present study was conducted in a somewhat unrealistic setting, wherein participants made a decision about something they had not

experienced desire for during a relevant, enduring timespan prior to the context of the choice. This contrasts to settings wherein people purchased something that involved planning. Therefore, investigating the effect in a more realistic setting is important to validate the findings of Study 1. Because of this, I conducted studies 2 and 3 asking participants to recall a real purchase. Moreover, although Study 1 undoubtedly explored post-decision information search, it was limited to search before experiencing the chosen option. This specific limitation is covered with Study 3.

Moreover, as afore posited, cognitive dissonance arises in specific situations, such as when individuals are responsible for their decisions and when a decision is important to them (JONES, 2002), and may explain post-decision information search to some extent. In Study 1, although individuals were responsible for their choices, accounting for cognitive dissonance effects would be inadequate because of the low level of personal involvement with the task. Studies 2 and 3 cover the cognitive dissonance though. I also mentioned that previous studies indicate that personality components might affect the amounts of information sought (as in GRANT, 2007). More specifically, maximizing tendencies represent a potential moderator of the effect of PK on AIS. This may occur because maximizers are expected to hold higher standards for external information gathering. In studies 2 and 3, I extended the main finding of Study 1 to incorporate the assessment of this potential moderation.

4. STUDY 2: THE ROLES OF MAXIMIZING TENDENCIES AND COGNITIVE DISSONANCE

Study 2 consists in a survey that should increase the external validity of the relationship between prior knowledge and information search as found in Study 1. Thus, I expect the direction of the effect to remain the same as observed in the brain-games decision setting. To enhance external validity while preserving the “mid-state” nature of the dependent variable in the setting of Study 1 (i.e., information search occurring after the final decision, but before the consumption experience), Study 2 takes advantage of real purchases that participants made, but were not able to use/experience yet (e.g., because the product had not been delivered by the time they took part in the survey). Authors have suggested that during this stage, cognitive dissonance and the consequent information search can achieve their highest prominence (MONTGOMERY; BARNES, 1993; OLIVER, 1997). Although consumers cannot evaluate objective outcomes of their decisions in the pre-use stage, they can start to examine the quality of their choice by continuing to browse shop windows, browsing online stores, or talking to friends in order to reassure them of their decision. Because consumers continue to refine their understanding of their choices, cognitive dissonance may rise and stimulate post-decision behavior, including boosts in information search, even before the consumer uses the product. I explore this possibility with Study 2.

Study 2 also features the introduction of maximizing tendencies (SCHWARTZ et al., 2002) as a potential moderator of the effect of PK on AIS (*RQ2*). Human maximizing tendency can be explained through the following anecdote: imagine that you are in the supermarket and you want to buy shampoo. As you arrive at the shampoo isle, you see several shampoo options. You read innumerable shampoo descriptions and spend a long time trying to figure out which one is the best option in the isle to take home. If you are the kind of person that would go through this (i.e., give yourself the job of figuring out the best option, even if it means putting extraordinary effort into it), you can be classified as a maximizer (i.e., someone who wants to maximize her/his choice), at least when it comes to buying shampoo. Simon (1956) was the first researcher to introduce the difference between maximizing and satisficing as choice-making strategies (IYENGAR; WELLS; SCHWARTZ, 2006). Although the limited information-processing capacities of individuals make perfect maximization impossible (SIMON, 1956), studies have shown that some individuals have higher tendencies seek choice-maximization than others (SCHWARTZ et al., 2002; IYENGAR; WELLS; SCHWARTZ, 2006; MA; ROESE, 2014).

An individual with high maximizing tendency is denominated maximizer. In contrast, an individual with low maximizing tendency is denominated satisficer. These individuals are characterized as individuals who settle with a “good enough” type of situation easily (SCHWARTZ et al., 2002). Maximizers, more than satisficers, exhaustively engage in gathering great amounts of information as preparation for decision-making because they want to choose the best option (IYENGAR; WELLS; SCHWARTZ, 2006). In addition, maximizers are more involved in product comparisons both before and after the purchase (SCHWARTZ et al., 2002).

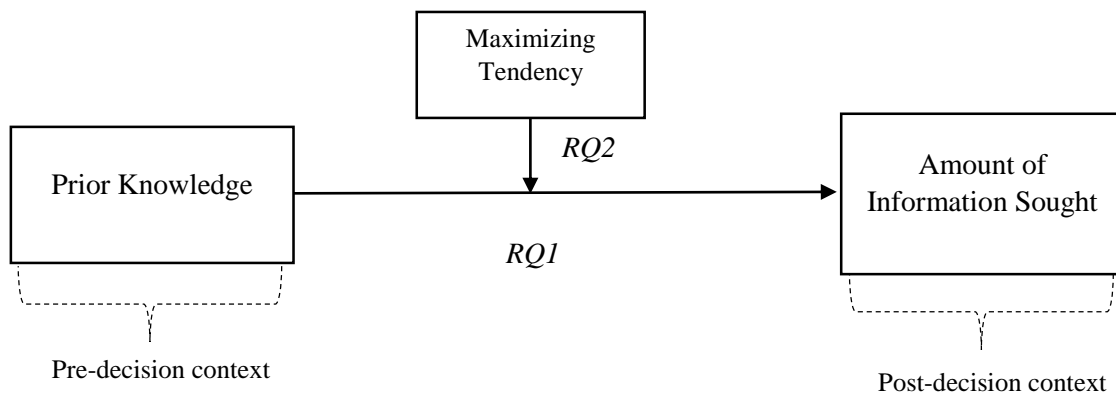
In the post-decision timespan, regret tends to arise with different intensities across the maximizer-satisficer continuum (IYENGAR; WELLS; SCHWARTZ, 2006; CARRILLAT; LADIK; LEGOUX, 2011). Maximizers feel more regretful of the decisions they make and, consequently, they tend to be more unhappy and report less satisfaction with their decisions’ outcomes in their post-purchase experiences. This particularity among maximizers brings to surface that post-purchase behaviors are different for maximizers and satisficers. Accordingly, maximizing tendencies have been associated with increased likelihood of switching and returning products (MA; ROESE, 2014).

Generally, maximizers seem to be more engaged with the decisions they make (SCHWARTZ et al., 2002). Note that some people may experience maximizing tendencies in specific situations, such as in high involvement contexts. However, maximization is largely understood as an individual trait that plays out regardless of the situation – i.e., at most non-automatic decision-making situations in life (SCHWARTZ et al., 2002; IYENGAR; WELLS; SCHWARTZ, 2006).

I assert that maximizing tendencies influence the effect of PK on AIS. This effect is probably more intense when individuals are maximizers because maximizers are likely to avidly gather information and call on their own prior knowledge to develop new queries. Assuming the positive relationship between prior knowledge and amounts of information sought and predicting a positive relationship between maximization and need for more information as well, it is plausible to infer that maximizers are more likely to use their prior knowledge to its full extent as a base for information search (SCHWARTZ et al., 2002). In essence, the effect of prior knowledge is intensified, or facilitated, by the “natural” search behavior of maximizers. In contrast, satisficers have well pre-defined parameters to judge when an option is satisfactory or not before making the final decision (CARRILLAT; LADIK; LEGOUX, 2011). When they find an option that fits within these parameters, they cease the search and assume that the benefit

of further investing in maximizing their choice does not pay off. Therefore, the more ‘satisficer’ the individual, the weaker the positive relationship between prior knowledge and post-decision information seeking. Possibly, for very high levels of satisficing (i.e., low levels of maximizing) tendencies, prior knowledge may decrease the amounts of post-decision information sought – instead of increasing it. This would suggest that the more satisficers know before making their final decision, the more assured they are that they made a choice that fits with their parameters and that gathering more information won’t benefit their consumption experience. The proposed moderating role of maximizing tendencies is the main object of my second research question (*RQ2*): *Do maximizing tendencies increase the effect of PK on post-decision AIS?* Figure 3 illustrates the model hypothesized for the formulation of *RQ2*.

Figure 3 - The effect of PK on AIS moderate by MT: conceptual model



Source: author (2016).

Finally, Study 2 accounts for cognitive dissonance as part of the main phenomenon as well. Exploring its contribution to the phenomenon adds considerably to both cognitive dissonance and post-purchase behavior literatures. Although many have suggested that cognitive dissonance explains post-decision information search (EHRlich; GUTTMAN; SCHÖNBACH; MILLS, 1956; FESTINGER, 1962), to the best of my knowledge, a relationship involving information search has never been tested with any measure of dissonance.

Festinger (1962) argues that post-decision information search can help individuals minimize/eliminate their cognitive dissonance, but the claim remained grounded on deduction rather than observations. Ehrlich et al. (1956) investigated if owners of a new car seek greater exposure to ads of the car they just bought than to ads promoting other cars. Additionally, they

compared owners of a new car to owners of an old car. They found that car owners generally search for advertising of the car they already own, and suggested that seeking advertisement exposure arises because of the emergence of cognitive dissonance at the early stages of the consumption experience. For consumers who bought their car long ago, this dissonance should be in a much more attenuated level. However, they did not effectively measure this dissonance. In fact, there was no difference in search behavior between recent buyers and old buyers, which might indicate that there are other possible explanations for advertisement exposure seeking, as the authors themselves recognized (EHRlich et al., 1956).

To the extent that prior knowledge should help consumers achieving higher quality decision-making and refining their expectations, it should decrease post-decision cognitive dissonance. In turn, lower cognitive dissonance predicts lower intensity in post-decision information seeking. Thus, deductive reasoning suggests that, if cognitive dissonance somehow mediates the relationship between prior knowledge and post-decision information search, prior knowledge should exert a negative effect on post-decision information seeking. In contrast, in Study 1 I found evidence for a positive relationship. This contradiction stresses the relevance in measuring cognitive dissonance in post-decision information search as I do in Study 2. More specifically, in Study 2 (and again in Study 3), I address the following research question as well (*RQ3*): *What is the role of cognitive dissonance in the relationship between PK and post-decision AIS?*

4.1 PROCEDURE

MTurk workers were asked to think of a recent, planned purchase they made but had not yet had an opportunity to use/experience and complete the survey using this purchase as the object of the items in the questionnaire. I explicitly asked them not to think of an everyday purchase (e.g., milk, bread, soap) because everyday products tend to be purchased in almost automatic processes. Because of this, everyday purchases might attenuate information search behavior regardless of prior knowledge and maximizing tendencies and might not even generate strong cognitive dissonance experiences. Participants wrote down the purchase they had in mind so I could examine whether it was in accordance with the requirement.

To avoid common method variance (CMV) issues, some questions were randomly ordered and different scale formats were used throughout the questionnaire (PADOSAKOFF; MACKENZIE; LEE; PADOSAKOFF, 2003). For example, I used a slider scale for the dependent variable (AIS) and seven-point scales for the measure of the independent variable

(PK). At the end of the survey, I asked participants if they could describe the purpose of the study. No response correctly guessed it. According to Chang et al. (2009), models and mechanisms that are difficult for subjects to identify minimize variance bias.

4.2 MEASURES

All items used in this study are in the Appendix of this document.

Independent variable: to measure consumers' prior knowledge (PK) I used a single item ("I had a lot of knowledge about this purchase before making my final decision," 1 = *strongly disagree*; 7 = *strongly agree*). This item reflects subjective PK (i.e., the level of domain-related knowledge participants believed they had before the final decision). Since participants thought of a real purchase, measuring objective knowledge would require testing domain knowledge differently across participants, the domain for each participant being the product or the class of the product they thought of. This would not only be an inconvenient operation to carry out, but would also give rise to several confounds due to the use of different measures across participants to score the same construct.

Dependent variable: To measure the AIS, I provided participants with eight sources of strategies to gather information that consumers often use to learn about products: (1) online reviews, (2) talking to friends/relatives, (3) browsing online stores, (4) visiting brick-and-mortar stores, (5) browsing shop windows, (6) comparing the purchased option to equivalent choices by other consumers, (7) attending to product information on social media, and (8) clicking on online ads that relate to their chosen product. All these items were randomly ordered when presented to consumers. Using a slider scale (0 = *I did not use this approach*; 100 = *I used this approach very intensely*), participants indicated how intensely they used each source/strategy to search for information about the purchase they had in mind after they had already completed the purchase. For the measure of AIS, I summed the scores participants assigned for each item.

Moderator variable: The maximizing tendency (MT) was measured with thirteen items adapted from Schwartz et al. (2002), (1 = "*I strongly disagree*"; 7 = "*I strongly agree*", $\alpha = .737$).

Mediator variable: To measure cognitive dissonance, I adapted the scale by Montgomery and Barnes (1993), eleven items, (1 = "*I strongly disagree*"; 7 = "*I strongly agree*", $\alpha = .843$).

4.3 SAMPLE

I recruited 151 MTurk workers, who spent, on average, about 10 minutes to complete the task. They received a payment of \$ 0.30. An attention-check item served as the filter and led 50 cases to be removed from the sample. I also checked whether participants thought of an everyday purchase to complete the survey, but no further case removal was necessary for this criterion. The final sample consisted of 101 MTurk workers (53 females, $M_{age} = 36.86$).

4.4 RESULTS

I started the analysis by conducting a hierarchical regression to see how the introduction of variables affected results in the model (FIELD, 2013). The full model accounted for the following predictors: PK, MT, the interaction term (PK*MT), and cognitive dissonance. The data met the assumption of non-collinearity (PK - *Tolerance* = .939, *VIF* = 1.065; MT - *Tolerance* = .887, *VIF* = 1.127; Cognitive Dissonance - *Tolerance* = .862, *VIF* = 1.160), according to thresholds listed in Field (2013).

The three-stage hierarchical multiple regression was conducted with AIS as the dependent variable. PK was entered first as a single predictor (Step1). Then, MT and the interaction term were entered on Step 2. At last, cognitive dissonance was introduced (Step 3). Results are displayed in Table 1.

On Step 1, PK was a nonsignificant predictor, $F(1,99) = .900$, *n.s.*, and accounted only for 0.9% of the variation in AIS. Introducing MT and the interaction term explained an additional 7.8% variation and this change in R^2 was significant, $F(2,97) = 4.134$, $p < .05$. The last addition, cognitive dissonance, explained an additional 11.8% of variation, and the R^2 change was significant, $F(1,96) = 1.756$, $p < .001$.

Table 1 - Summary of hierarchical regression analysis for variables predicting AIS

Variable	B	T	R	R ²	ΔR ²
Step 1			.095	.009	-.001
Prior Knowledge (PK)	6.826	.949			
Step 2			.295	.087	.059
Prior Knowledge (PK)	7.010	.999			
Maximizing Tendency (MT)	25.561	1.879 ¹			
MT*PK	13.712	1.809 ²			
Step 3			.454	.206	.173
Prior Knowledge (PK)	12.707	1.883 ³			
Maximizing Tendency (MT)	11.414	.856			
MT*PK	17.301	2.413*			
Cognitive Dissonance	47.489	3.769**			

Note: ¹ $p = .063$; ² $p = .074$; ³ $p = .063$; * $p < .05$; ** $p < .01$.

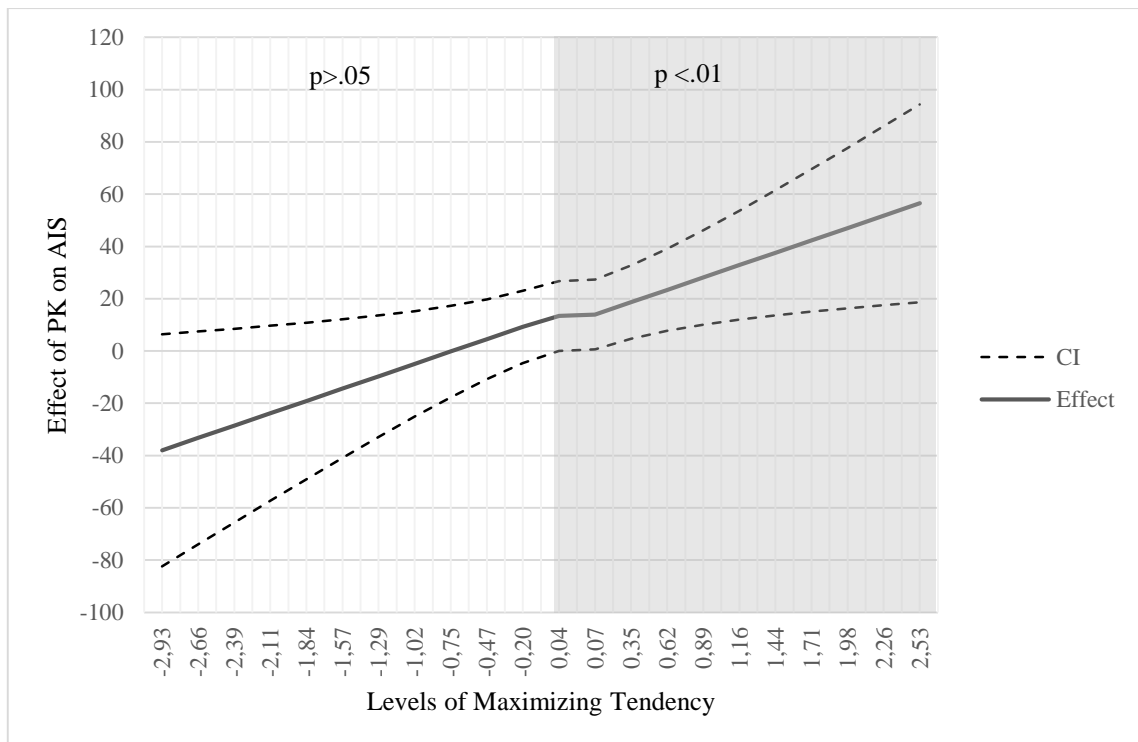
Source: author (2016).

The full model (Step 3 – PK, MT, MT*PK, and Cognitive Dissonance as predictors of AIS) is significant, $F(4,96) = 6.228, p < .001$, and explains 20.6% of AIS. This model revealed an effect of PK of marginal significance ($\beta = 12.707, t = 1.883, p = .063$) – and the models entered in the previous steps indicated nonsignificant effects of PK. This raises the possibility that PK might be considerably sensitive to suppressors. Because this survey used a real purchase for the setting, the effect of PK possibly competes with that of several other factors that influence consumers’ post-purchase behavior (e.g., cognitive dissonance, regret), which may be relevant for a better adjustment of the regression. Not surprisingly, the effect of PK achieved its best significance level with the model that included a greater number of predictors. In line with our observation in Study 1, the effect was positive. MT had a statistically nonsignificant effect ($\beta = 11.414, t = .859, n.s.$). More importantly, the proposed interaction exerted a statistically significant effect on AIS ($\beta = 17.301, t = 2.413, p < .05$). Cognitive dissonance also exerted a significant effect ($\beta = 47.489, t = 3.796, p < .01$).

Using PROCESS (model 1 – HAYES, 2013), I estimated effects of PK at values of MT. I used the Johnson-Neyman technique to conduct a floodlight (SPILLER et al., 2013). Results suggested that PK does not affect AIS at the lowest levels of maximization (i.e., among satisficers). For maximization levels closer to the sample mean ($MT > .039$, mean-centered),

effects of PK were significant and positive, increasing in size as a function of MT. This means that positive effects of PK arise when individuals are not satisficers and tend to increase with maximization tendencies. Figure 3 graphically represents the floodlight estimations and Table 2 displays its results.

Figure 4 - The effect of the interaction PK and MT on post-decision AIS



Note: Confidence Interval (CI) bands represent the “range” for 95% CI.
Source: author (2016).

Table 2 - Floodlight analysis: effect of PK on AIS for MT levels

Max	Effect	se	T	P	95%LLCI	95%ULCI
-2.9315	-38.0097	22.3698	-1.6992	0.0925	-82.4136	6.3942
-2.6584	-33.2853	20.5117	-1.6227	0.1079	-74.0009	7.4302
-2.3853	-28.5609	18.6739	-1.5295	0.1294	-65.6285	8.5066
-2.1122	-23.8365	16.8631	-1.4135	0.1607	-57.3096	9.6366
-1.8392	-19.1121	15.089	-1.2666	0.2084	-49.0637	10.8394
-1.5661	-14.3878	13.3663	-1.0764	0.2844	-40.9196	12.1441
-1.293	-9.6634	11.7175	-0.8247	0.4116	-32.9225	13.5958
-1.0199	-4.939	10.1788	-0.4852	0.6286	-25.1437	15.2658
-0.7469	-0.2146	8.8079	-0.0244	0.9806	-17.6981	17.269
-0.4738	4.5098	7.6951	0.5861	0.5592	-10.765	19.7846
-0.2007	9.2342	6.9653	1.3257	0.1881	-4.5919	23.0604
0.039	13.3808	6.741	1.985	0.05	0	26.7616
0.0724	13.9586	6.744	2.0698	0.0412	0.5719	27.3454
0.3454	18.683	7.0789	2.6392	0.0097	4.6315	32.7346
0.6185	23.4074	7.8997	2.9631	0.0038	7.7266	39.0882
0.8916	28.1318	9.0755	3.0998	0.0025	10.1171	46.1465
1.1647	32.8562	10.4875	3.1329	0.0023	12.0387	53.6737
1.4378	37.5806	12.053	3.1179	0.0024	13.6555	61.5057
1.7108	42.305	13.7196	3.0835	0.0027	15.0718	69.5382
1.9839	47.0294	15.4546	3.0431	0.003	16.3523	77.7065
2.257	51.7538	17.2373	3.0024	0.0034	17.5379	85.9696
2.5301	56.4782	19.0544	2.964	0.0038	18.6554	94.301

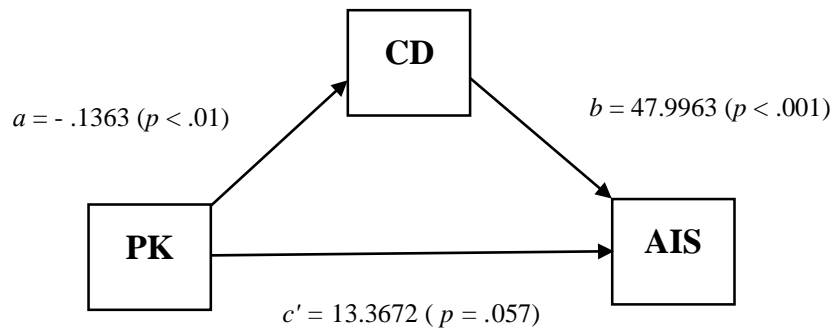
Source: author (2016).

Next, I turned my attention to address the potential mediating property of cognitive dissonance. Multivariate analysis literature has followed that a critical starting point for mediation analysis is a significant direct effect without controlling for the mediation, as stated by Baron and Kenny (1986). However, the current paradigm on mediation analysis contradicts this assumption. For instance, Rucker et al. (2011) demonstrate that even with nonsignificant direct effect, a significant indirect effect may exist. Building on this paradigm, although a significant simple effect of PK was not consistent throughout the hierarchical procedure (as in the Step 1, reported in Table 1), I examined a potential mediation through cognitive dissonance.

Using PROCESS (model 4 - HAYES, 2013), I examined a model with PK (independent variable), cognitive dissonance (CD - mediator), and AIS (dependent variable). Figure 4 displays results of the path analysis estimated in this model. Results revealed a significant indirect effect, $a*b = -6.5410$, 95% bootstrap CI [-15.8077,-1.3458]. However, the direct effect (c' path) was marginally significant after controlling for the mediation, which indicates that the effect of PK on AIS might hold even when cognitive dissonance mediates part of the relationship. These mediation results indicate that cognitive dissonance is probably not the only mediator of the focal relationship (PK→AIS) and reinforce the skepticism I developed

regarding the role of cognitive dissonance throughout the beginning of section 4. Moreover, the observed indirect effect follows the opposite direction of the direct effect. This is consistent with the idea of cognitive dissonance as a suppressing variable. Although the mediation analysis showed a significant indirect effect, it is important to examine these results with parsimony and they require further validation. Next, I lay out the reasons why.

Figure 5 - Statistical model of mediation analysis



Source: author (2016).

4.5 DISCUSSION

Study 2 indicated that the effect of PK on AIS is positive, in accordance with Study 1. However, results revealed only a marginal effect. The second study demonstrated that the effect of PK on post-decision AIS is moderated by MT, which is in tune with *RQ2 (Do maximizing tendencies increase the effect of PK on post-decision amounts of information sought?)* and with literature that posits that maximizers are more engaged with their decisions (CARRILLAT; LADIK; LEGOUX, 2011). A floodlight analysis indicated nonsignificant effects of PK for individuals with low maximizing tendencies.

In view of *RQ3 (What is the role of cognitive dissonance in the relationship between prior knowledge and post-decision amounts of information sought?)*, this study indicated that cognitive dissonance significantly affects the proposed model. However, some scale-related issues might play a role in this finding, particularly in the results of the mediation analysis. One may argue that the Montgomery and Barnes' scale (1993) is composed of items that indicate the existence of cognitive dissonance, but they alone do not reflect the existence of dissonance

directly, nor contemplate all the cognitive dissonance dimensions (SWEENEY; HAUSKNECHT; SOUTAR, 2000). Some critics point out that Montgomery and Barnes (1993) did not investigate the cognitive dissonance categories with an exploratory study during their initial stages of research, which may be harmful to scale effectiveness (SWEENEY; HAUSKNECHT; SOUTAR, 2000). Moreover, the scale includes items that measure desire to search for more information regarding the past decision and choice-uncertainty, which are constructs that, conceptually, hang in proximity with independent and dependent variables: prior knowledge and the amounts of information individuals sought in the post-decision timespan. Intuitively, it is evident that the desire to do something should predict the behavior of actually doing it. In addition, this desire (to acquire more information) might be a manifestation of the cognitive dissonance experience, but it does not necessarily represent the observation of dissonance. This desire may emerge for reasons other than cognitive dissonance as well (I extend this discussion in another section of this thesis), such as engagement with the product. The same rationale applies to choice-uncertainty, which, for instance, might be stimulated by the acquisition of new choice-related information that contradicts information used during the choice-making task. Moreover, prior knowledge might exert a negative effect on uncertainty. Arguably, the observed mediation might have emerged as a byproduct of the relationship of prior knowledge with cognitive dissonance due to the effect of knowledge on uncertainty-related items combined with the strong correlation between items related to desire to acquire new information and the measure of amounts of information sought.

I carried out four additional regressions to verify the validity of this rationale. First, I composed a variable using only uncertainty-related items and another variable using only the items related to the will to gather new information. The first regression consist of PK as the predictor of the uncertainty, which revealed a negative effect, $\beta = -.189, p < .01$. In the second regression, I replaced uncertainty with desire to acquire information, finding no effect, $\beta = .005, n.s.$ These results supports that the relationship between PK and cognitive dissonance in this study were observed due to the uncertainty-related items within the cognitive dissonance measure. In the third regression, AIS was regressed on the measured composed only of items reflecting desire to acquire new information, revealing a significant effect, $\beta = 35.382, p < .001$. At last, AIS was regressed on choice-uncertainty and the effect was nonsignificant for an $\alpha < .05$ significance criterion, $\beta = 19.139, p = .086$ – this p-value could be judged as significant for a $\alpha < .10$ criterion. Overall, this further validates the explanation for the significant indirect effect in Study 2 by indicating that the items reflecting desire for additional information

embedded in the cognitive dissonance measure were the main contributors for the effect of the dissonance measure on AIS. Because of these aspects related to the cognitive dissonance measure, I propose to attempt to replicate the findings surrounding the role of cognitive dissonance using an alternative measure for the construct (Study 3).

In addition, given that, in this survey, I investigated the focal phenomenon in relation to a purchase consumers had not have an opportunity to use/experience – projecting a context similar to that of Study 1 –, the following question remains to be addressed (*RQ4*): *Do consumers also search for information as a function of prior knowledge after they experienced their final decision (i.e., after they experienced/used the purchase)?* Study 3 addresses this question as well.

5. STUDY 3: A POST-USAGE INVESTIGATION

Study 3 follows the same general structure as Study 2. The major difference is that, in Study 3, I explored effects in a post-usage context (i.e., after the chosen product has been used). Additionally, in the current study, I measured cognitive dissonance using the scale by Sweeney et al. (2002). This scale includes items reflecting emotional aspects of the dissonance experience, wisdom of purchase, and concerns over the deal made. This scale is more closely related to Festinger's (1962) cognitive dissonance concept. In addition, Sweeney et al.'s (2002) scale development procedure was more conservative, following Churchill's (1979) instructions.

The last additional feature of Study 3 is the introduction of a satisfaction measure, based on studies that show that regret can increase post-decision information search (SHANI; ZEELENBERG, 2006). Consumers' satisfaction served as a mean to address the role of feelings of regret in increasing post-decision information search. This is plausible because satisfaction has a strong negative relationship with regret (SHANI; ZEELENBERG 2006; OLIVER, 2014).

5.1 PROCEDURE

I specifically asked participants to think of a recent, planned purchase that they already used/experienced. Again, there were explicit instructions not to think of an everyday purchase. Participants wrote down their purchase in an appropriated space so I could check if the purchases they thought of were in accordance with the instruction. The same approach as in Study 2 was employed to reduce CMV issues.

5.2 MEASURES

All items used in this study can be found in the Appendix of this document.

Independent variable: PK was measured as reported in Study 2.

Dependent variable: AIS was measured as reported in Study 2.

Moderator: MT was measured as reported in Study 2 ($\alpha = .725$).

Mediator variable: To measure participants' cognitive dissonance after the final decision, I used 21 items from Sweeney et al. (2000) (1 = "I strongly disagree"; 7 = "I strongly agree", $\alpha = .972$).

Covariate: Satisfaction with the purchase was measured with 4 items adapted from Oliver (2014) (1 = "I strongly disagree"; 7 = "I strongly agree", $\alpha = .960$).

5.3 SAMPLE

For this study, 160 MTurk workers were recruited. They spent, on average, around 11 minutes to complete the task and were compensated with \$ 0.30. Eight cases were excluded from the sample for not following the instructions regarding the purchase they should think of during the task. These cases were participants who thought of an everyday purchase (e.g., milk, bread) or products meant for others to use (e.g., “a book for my brother”). I also filtered out participants who failed on the attention check (47 cases). No one was excluded for guessing the purpose of the study (i.e., no one guessed it correctly). Thus, 55 cases were removed and the final sample consisted of 105 MTurk workers (65 females; $M_{age} = 36.96$).

5.4 RESULTS

Before focusing on replicating findings of the previous studies, I verified if satisfaction could exert some influence on post-experience AIS. A correlation analysis to test a relationship between satisfaction and AIS showed a null result ($r = .068, n.s$). This could indicate that accounting for satisfaction could be of no contribution for the study. None of the analyses reported next incorporated satisfaction, but it is worth informing that I conducted the same analyses with the satisfaction measure included and it did not exert any effect on the outcomes nor influenced the conclusions drawn from the analyses.

As with Study 2, I conducted a hierarchical regression analysis on IBM SPSS 21 software. At the final step of the procedure (Step 3), the predictors were PK, MT, the interaction (MT*PK), and cognitive dissonance. The model met the assumption of collinearity for the regression analysis (PK - *Tolerance* = .980, *VIF* = 1.020; MT - *Tolerance* = .939, *VIF* = 1.065; MT*PK - *Tolerance* = .925, *VIF* = 1.081; Cognitive Dissonance - *Tolerance* = .977, *VIF* = 1.024). PK was entered on Step 1. Then, MT and the interaction term (MT*PK), on Step 2. And cognitive dissonance on Step 3. Results are shown in Table 3.

Table 3 - Summary of hierarchical regression analysis for variables predicting AIS

Variable	B	t	R	R ²	ΔR ²
Step 1			.156	.024	.015
Prior Knowledge (PK)	14.478	1.605			
Step 2			.376	.141	.116
Prior Knowledge (PK)	15.551	1.804 ¹			
Maximizing Tendency (MT)	27.088	1.537			
MT*PK	29.533	2.919**			
Step 3			.460	.212	.181
Prior Knowledge (PK)	16.982	2.044 ²			
Maximizing Tendency (MT)	25.608	1.509			
MT*PK	25.862	2.635**			
Cognitive Dissonance	25.231	3.002**			

Note: N=105; ¹: $p = .074$; ²: $p = .0591$; ** $p < .01$.

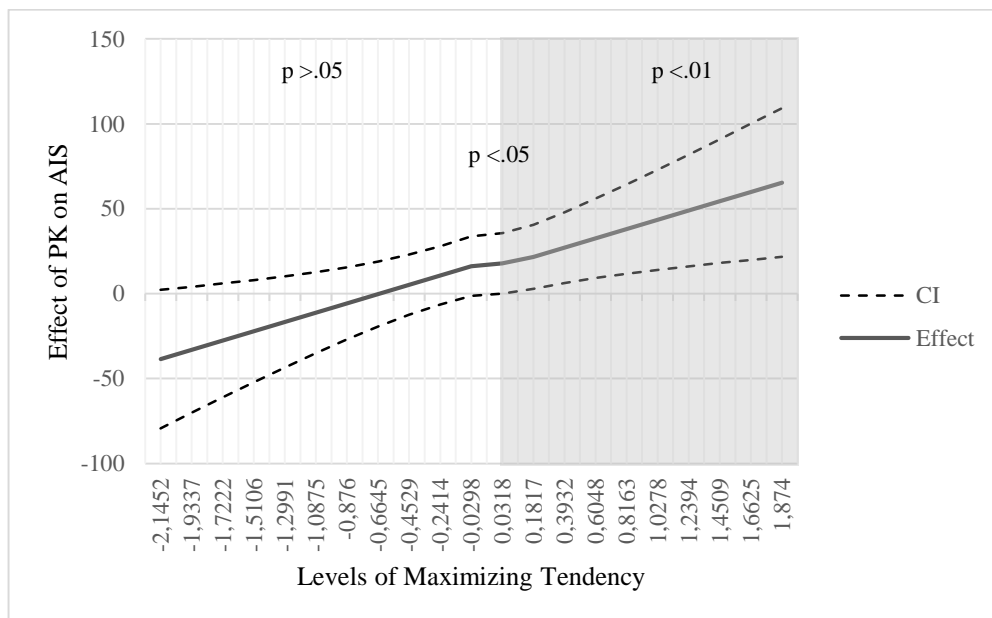
Source: author (2016).

The hierarchical multiple regression revealed that PK alone does not contribute significantly for the model, $F(1,103) = 2.577$, $n.s$, and accounted for 2.4% of the variation in AIS. Introducing MT and the interaction term explained an additional 11.7% of variation in AIS and the change in R^2 was statistically significant, $F(2,101) = 6.856$, $p < .01$. Finally, the introduction of cognitive dissonance explained an additional 7.1% of variation and the change was significant, $F(1,100) = 9.014$, $p < .01$.

Results of the hierarchical regression indicated that the third model (PK, MT, MT*PK, and cognitive dissonance as predictors of AIS) is significant, $F(4,100) = 6.728$, $p < .001$, and explains 21.2% of AIS, as shown in Table 3. The regression analysis of the third model revealed a positive effect of PK with moderate significance ($\beta = 16.982$, $t = 2.044$, $p = .0591$), just as in Study 2. The effect of MT was statistically nonsignificant ($\beta = 25.608$, $t = 1.509$, $n.s$). More importantly, the proposed interaction had a statistically significant effect on post-experience AIS ($\beta = 25.862$, $t = 2.635$, $p < .01$). Cognitive dissonance had a significant effect as well ($\beta = 25.231$, $t = 3.300$, $p < .01$). These results provide a positive answer to *RQ4*: PK affects post-decision and post-experience AIS similarly and, in both scenarios, MT moderates the effect of PK on AIS.

To estimate the effects of PK according to MT values, a floodlight analysis was using the Johnson-Neyman technique was carried out (SPILLER et al., 2013). I used model 1 in PROCESS (HAYES, 2013) for this procedure. For high levels of maximization (MT >.032, mean centered) – i.e., individuals called maximizers – effects of PK were positive and increasing as a function of MT. Figure 4 graphically represents the floodlight analysis and Table 4 displays its results. Worth noticing, negative effects of PK on AIS achieved moderate levels of significance at the lowest levels of maximization (MT < -1.934, mean centered) – i.e., individuals called satisficers –, as shown in Table 4.

Figure 6 - The effect of the interaction PK and MT on post-decision AIS



Note: Confidence Interval (CI) bands represent the “range” for 95% CI.

Source: Author, 2016.

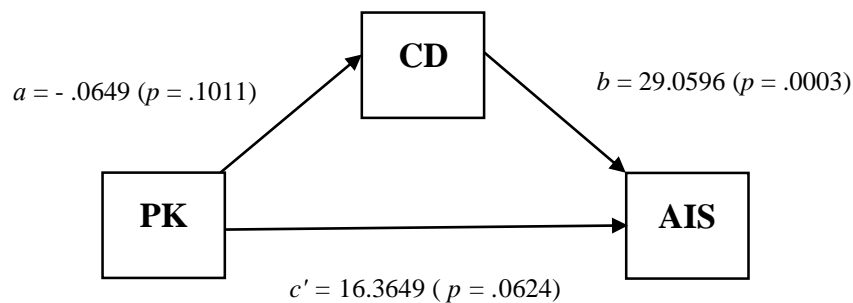
Table 4 - Floodlight analysis: effect of PK on AIS for MT levels

MAX	Effect	Se	t	P	LLCI	ULCI
-2,1452	-38,4989	20,5495	-1,8735	0,0639	-79,2686	2,2708
-1,9337	-33,028	18,7082	-1,7654	0,0805	-70,1446	4,0886
-1,7222	-27,5571	16,9152	-1,6291	0,1064	-61,1164	6,0022
-1,5106	-22,0862	15,1875	-1,4542	0,149	-52,2179	8,0455
-1,2991	-16,6153	13,5503	-1,2262	0,223	-43,4987	10,2681
-1,0875	-11,1444	12,0404	-0,9256	0,3569	-35,0323	12,7434
-0,876	-5,6735	10,7118	-0,5296	0,5975	-26,9255	15,5785
-0,6645	-0,2026	9,6399	-0,021	0,9833	-19,3279	18,9227
-0,4529	5,2683	8,9176	0,5908	0,556	-12,4239	22,9605
-0,2414	10,7392	8,6331	1,244	0,2164	-6,3885	27,867
-0,0298	16,2101	8,8288	1,836	0,0693	-1,306	33,7263
0,0318	17,8033	8,9736	1,984	0,05	0	35,6067
0,1817	21,681	9,4751	2,2882	0,0242	2,8826	40,4794
0,3932	27,1519	10,489	2,5886	0,0111	6,342	47,9618
0,6048	32,6228	11,7759	2,7703	0,0067	9,2597	55,9859
0,8163	38,0937	13,2566	2,8736	0,005	11,7931	64,3944
1,0278	43,5646	14,8732	2,9291	0,0042	14,0566	73,0727
1,2394	49,0355	16,5861	2,9564	0,0039	16,1291	81,942
1,4509	54,5065	18,3684	2,9674	0,0038	18,064	90,9489
1,6625	59,9774	20,2017	2,9689	0,0037	19,8977	100,057
1,874	65,4483	22,0733	2,965	0,0038	21,6554	109,2411

Source: Author, 2016.

I also ran a mediation analysis using PROCESS (model 4) to verify if the indirect effect observed in Study 2 would emerge with the cognitive dissonance scale used for this study. PK served as the independent variable, cognitive dissonance (CD) as the mediator, and AIS as the dependent variable. The model is graphically represented on Figure 4.

Figure 7 - Statistical model of mediation analysis 2



Source: author (2016).

This time, an indirect effect did not emerge, $a*b = -1.8870$, 95% bootstrap CI [-9.4133, 3.4040]). The coefficient for the c' path was marginally significant. This is an important observation because the cognitive dissonance scale used in this survey was designed to address flaws in the scale of dissonance used in Study 2 (SWEENEY; HAUSKNECHT; SOUTAR, 2000). Thus, results of the current study surrounding the role of cognitive dissonance might be deemed more robust and reliable than results of Study 2. Results regarding the roles of PK and MT, on the other hand, confirm my prior findings and rationale.

5.5 DISCUSSION

Study 3 is in tune with *RQ4* (*Do consumers also search for information as a function of prior knowledge after they experienced their final choice?*). The findings showed a positive and moderately significant effect of PK on AIS ($p = .059$) in post-usage timespan. This is consistent with my primary speculation and the direction of the effect was validated across all studies. Furthermore, the overall expectations regarding the proposed interaction were supported. The floodlight provoked the possibility that, for satisficers, the effects of PK on AIS may be negative by yielding marginally significant effects at the lowest levels of maximization. This could mean that the post-experience information search is reduced for participants with low maximizing tendency and high PK. When making a decision, satisficers have specific pre-defined parameters that help them search for information and make a decision with ease and lower levels of uncertainty (SCHWARTZ et al., 2006; CARRILLAT; LADIK; LEGOUX, 2011; MA; ROESE, 2014). As consequence, when they find an option that conforms to their parameters, they settle for it and are unlikely to engage in post-decision behaviors – as opposed to what maximizers do (MA; ROESE, 2014). To the extent that satisficers hold knowledge about product they bought, they are unlikely to feel the need to search for more information about it. Because of this, a potential negative effect of PK on AIS should not be rejected.

As foreseen in consumer knowledge literature, I observed that the positive effect of PK on AIS is more likely to arise when individuals are maximizers rather than satisficers. This adds to the literature on maximizing tendency that states that maximizers are more engaged in post-decision behaviors (MA; ROESE, 2014). In sum, the combination of PK and maximizer's peculiarities increases post-decision (pre-experience) and post-experience AIS.

Lastly, cognitive dissonance acts as an important factor. This was observed across studies 2 and 3. However, Study 3 revealed an absence of the mediating property of cognitive dissonance to the relationship between PK and AIS. Although the cognitive dissonance measure

significantly increased the capacity of explanation of AIS in both studies 2 and 3, the observed mediation in Study 2 might have been a byproduct of my scale choice. The scale measures behaviors/feelings that reflect the potential (not the unquestionable) existence of dissonance and that might relate to PK and AIS for other reasons. Study 3 suggests that, although influential in post-decision information search phenomena, cognitive dissonance might not play the role of a bridging factor to the relationship of PK with AIS.

6. THE ROLE OF COGNITIVE DISSONANCE AND CHOICE-UNCERTAINTY

This research suggests that individuals' prior knowledge (as in the decision-related knowledge they held prior to the event of making the final choice) affects post-decision amounts of information sought. According to previous research, information search behavior during the post-decision experience could be a primary indication that the decision-maker is going through dissonance between her/his expectation with the choice and the new evidences that downgrade the perceived quality of the choice (FESTINGER, 1962). Despite this speculation, studies that investigated information search after the final decision did not account for a measure of this dissonance in their empirical works (e.g., EHRLICH; GUTTMAN; SCHÖNBACH; MILLS, 1957; DONELLY; IVANCEVICH, 1970). Overall, the assumption that cognitive dissonance is a predictor of post-decision information search is mostly based on theory and deduction rather than on empirical evidence (e.g., FESTINGER, 1962; SWEENEY; HAUSKNECHT; SOUTAR, 2000; JONES, 2002). Across studies 2 and 3 and using different scales, I empirically demonstrated that cognitive dissonance predicts the intensity with which consumers seek more information about their choices after the final decision.

Two mediation analyses with cognitive dissonance computed as a mediator of the effect of PK on AIS were examined. In Study 2, the mediation was statistically significant and the direct effect remained marginally significant. However, in this case, the cognitive dissonance scale might have forced the observation of an indirect effect. Montgomery and Barnes' (1993) scale involves items that represent the desire to acquire more information and uncertainty toward the choice. Items reflecting these factors might serve as indicators of some working cognitive dissonance, but they represent constructs that might also be influenced by factors other the cognitive dissonance (SWEENEY; HAUSKNECHT; SOUTAR, 2000). Moreover, although the combination of uncertainty items and desire to acquire new information items can reflect the existence of cognitive dissonance, they do not completely tap all aspects of the dissonance experience. For instance, the scale does not account for psychological states, an important cognitive dissonance dimension (FESTINGER, 1962; SWEENEY; HAUSKNECHT; SOUTAR, 2000).

In Study 3, I covered the concerns with the cognitive dissonance measure exposed above (and in the discussion of Study 2) by using an alternative scale. Particularly, one that accounts for the psychological states associated with cognitive dissonance. However, the mediation analysis in Study 3 did not reveal a significant indirect effect. This finding reinforces the idea

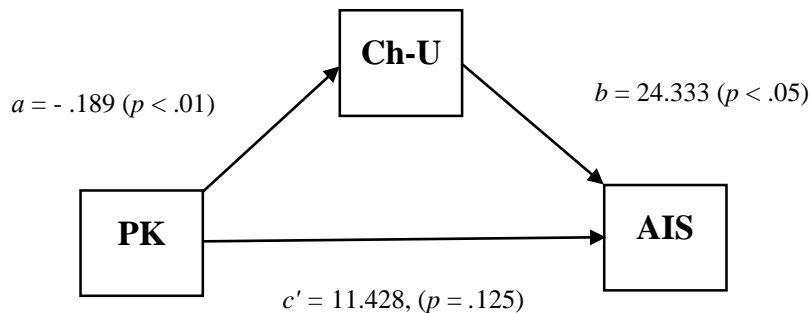
that cognitive dissonance might not represent a bridging factor between prior knowledge and post-decision information seeking.

One should not neglect the fact that an indirect effect emerged in Study 2 though. Moreover, this indirect was of the opposite sign to the total effect of prior knowledge repeatedly observed throughout this research. This hints that some component within Montgomery and Barnes' scale might play an important bridging role. Specifically, I extended the primary analysis agenda in Study 2 with four additional regressions and found, among other things, that (1) prior knowledge affects choice-uncertainty and (2) a relationship between choice-uncertainty and the AIS measure could be deemed significant for an $\alpha < .10$ significance criterion. These findings could hint that choice-uncertainty plays this role.

Overall, uncertainty can emerge due to three general classes of factors: a) inadequate understanding; b) incomplete information; and c) undifferentiated alternatives (LIPSHITZ; STRAUSS, 1997). Incomplete information occurs when an individual misses information to make a decision (LIPSHITZ; STRAUSS, 1997). This connects to the idea of prior knowledge as the total accessible information stored in memory before a task (e.g., a purchase – BRUCKS, 1985). Consumers with low prior knowledge are more likely to feel as if they missed information for the decision task. Thus, they are more likely to experience feelings of uncertainty. In turn, this uncertainty drives consumers to engage in information search. The information search behavior might occur after the decision task to the extent that information was still missing at the moment of the final decision. In contrast, consumers with high prior knowledge are likely to feel less uncertain about the accuracy of their decision and display lower engagement in post-decision information seeking. This rationale implies that prior knowledge might exert an effect on amounts of information sought through choice-uncertainty.

In order to test this perspective, I carried out another mediation analysis using data from Study 2. In this analysis, PK was used as the independent variable, AIS as the dependent variable, and a variable consisting only of choice-uncertainty-related items from Montgomery and Barnes' cognitive dissonance measure (represented as Ch-U in Figure 7) as the mediator. Results of the coefficients in each path of this model are displayed in Figure 7. It is worth pointing out that, possibly because of the inclusion of a coefficient for prior knowledge as a predictor of information seeking, this time I found a significant effect of choice-uncertainty with $p < .05$, which contrasts with what I observed when information seeking was regressed on choice-uncertainty alone (See Study 2, discussion section). The model revealed a significant indirect effect, $a*b = -4.602$, 95% bootstrap CI [-11.773, -.146].

Figure 8 - Statistical model of mediation analysis 3



Source: author (2016).

The indirect effect that prior knowledge exerts through choice-uncertainty opposes to the total effect in its direction. The facts that the indirect effect occurs in the opposite direction of the total effect and that the direct path, although nonsignificant, resulted in an effect size greater - with an associated p-value lower - than the model where prior knowledge was examined as a sole predictor suggest that the role of choice-uncertainty is probably that of an inconsistent mediator, or a suppressor (MACKINNON; KRULL; LOCKWOOD, 2000; RUCKER, et al., 2011). This brings to surface two important aspects of suppression effects.

Suppression occurs “when an indirect effect has a sign that is opposite to that of the total effect, and thus omission of the suppressor might lead the total effect to appear small or nonsignificant.” (RUCKER et al., 2011, p. 366). Thus, “the $X \rightarrow Y$ relationship is actually strengthened, not weakened, by including an intervening variable” (RUCKER et al., 2011, p. 366). The suppression effect is different from confounding and mediation effect. Confounding and mediation occur when “a statistical adjustment for a third variable will reduce the magnitude of the relationship between the independent and dependent variables” (MACKINNON; KRULL; LOCKWOOD, p. 174, 2000). Conversely, when the magnitude of the relationship between a dependent variable and an independent variable enlarges as we include new variables, one may infer the existence of suppressing factors (MACKINNON; KRULL; LOCKWOOD, 2000). The most generally accepted suppressor variable definition is provided by Conger (1974): “a variable which increases the predictive validity of another variable (or set of variables) by its inclusion in the regression equation.” (p. 36-37). In this sense, the mediation analysis using choice-uncertainty is reinforced by the hierarchical regressions in studies 2 and 3, wherein results of the estimate for the effect of prior knowledge increased in size and decreased in associated p-value as new predictors were brought into the

models. That is, the relationship of prior knowledge and post-decision information seeking might exist, but is probably masked by a series of intervening factors (such as uncertainty). This is the first aspect that comes to surface. In light of this perspective, the results of the interaction with maximization tendencies indicate that this relationship is more resilient to potential intervening factors when consumers are maximizers. Additionally, it is plausible to suggest that Study 1 was the most successful study to observe an effect of prior knowledge due to the highly controlled setting and to the use of an objective measure for prior knowledge.

The second aspect that comes to surface is what it means for choice-uncertainty to give rise to a negative indirect effect. The most important conclusion from this finding is that we cannot assign the role of a mediator, or a mechanism, of the effect of prior knowledge to choice-uncertainty. Choice-uncertainty might serve as a mediator to other predictors of information search though. For instance, one may expect that exposure to mixed opinions about a product prior to its purchase increases post-purchase information seeking because it increases uncertainty toward the purchase, which positively affects information seeking. As a suppressor to the relationship between prior knowledge and information seeking, choice-uncertainty represents a path through which the positive effect of prior knowledge on post-decision information seeking is diminished (CERIN; MACKINNON, 2009). This means that product knowledge prior to the decision will lead to more post-decision information searching to the extent that uncertainty is not reduced by this knowledge.

In Study 3, I did not measure uncertainty with choice accuracy because first I aimed to conclude the inquiry on the role of cognitive dissonance. Thus, Study 3 served to verify whether cognitive dissonance could bridge the relationship between knowledge and post-decision information searching. Worth noticing, according to the exposition in the beginning of section 4, had an indirect effect through cognitive dissonance truly emerged, it would probably represent a suppressing phenomenon as well. However, by replacing the measure of cognitive dissonance with a more robust measure in Study 3, no indirect effect was observed. This measure accounted for emotional and cognitive states that arise with the experience of dissonance and can be regarded as a better approach to examine the emergence of this experience.

7. GENERAL DISCUSSION

The present study examined the effect of individuals' prior knowledge on post-decision amounts of information sought. Because an effect of prior knowledge on information search behavior has only been studied with focus on pre-decision settings (BRUCKS 1985; GUO, 2001), this work contributes to consumer information search literature by investigating this relationship when additional information search occurs after the final decision.

Study 1 showed that individuals holding objective decision-related knowledge before making their final choice (vs. individuals holding no such knowledge) search for more information related to the available options after they made their final decision and could not change it anymore. More specifically, I manipulated objective prior knowledge, which is paradigm that deserves more emphasis in consumer information search studies, since most empirical works use evidence of subjective knowledge (BRUCKS, 1985; CARLSON et al., 2009).

In Study 2, I conducted a survey involving real purchases (but which participants had not used or experienced by the time they took part in the study) in order to increase external validity of the phenomenon observed in Study 1. I also proposed a moderation effect exerted by maximizing tendencies. Furthermore, I explored cognitive dissonance (FESTINGER, 1962; SWEENEY; HAUSKNECHT; SOUTAR, 2000) in the focal phenomenon. In this study, the knowledge measure reflected participants' subjective knowledge. Generally, Study 2 reinforces the relationship between knowledge and information seeking observed in Study 1 (but with a simple effect of moderate significance), but demonstrated that it might be subject of a series of other factors when tested in more realistic settings. For starters, unlike Study 1, Study 2 showed that without the introduction of additional predictors, a significant effect of prior knowledge might be unobserved. Additionally, the results showed an interaction wherein maximizers are more likely to search for more information after making their final choice as a function of their prior knowledge than satisficers. In fact, for satisficers, the effect was nonsignificant. At last, I explored the role of cognitive dissonance by means of a mediation analysis and found significant evidence of inconsistent mediation. However, suspecting this evidence might have been forced by characteristics of Montgomery and Barnes' cognitive dissonance scale, I did not draw conclusions from this test prior to testing whether it would hold if another measure were used.

Study 3 explored the effect of prior knowledge found in studies 1 and 2, but it extends the examination to information search behavior after consumers already used/experienced their

purchase. In addition, a different cognitive measure was used for an attempt to replicate results of the mediation analysis in Study 2 and I also examined effects of satisfaction (inspired by the possibility of feelings of regret motivating information search). Results showed that even when consumers already used/experienced their purchase, prior (subjective) knowledge affects amounts of information sought (again with moderate significance), just as in Study 2. Once again, I observed an interaction with maximizing tendencies. However, negative effects of prior knowledge with moderate levels of significance were considerably salient among individuals at the lowest levels of maximization tendencies (i.e., satisficers) than observed in the results of a floodlight in Study 2. It is possible that under certain circumstances, this negative effect becomes stronger. However, no claim about the existence of this effect can be drawn based on the current findings. The examination of effects of satisfaction in Study 3 revealed null relationships. More importantly, although the cognitive dissonance measure used in Study 3 exerted a significant effect on information seeking, no indirect effect was observed in the mediation analysis when it was computed as a mediator.

At last, I returned to the data collected for Study 2 and re-examined it. More specifically, I proposed that choice-uncertainty, a construct “embedded” within Montgomery and Barnes’ cognitive dissonance measure, could be an important factor working as a suppressor of the relationship of prior knowledge with information search and I ran a mediation analysis computing choice-uncertainty as the mediator. Results supported that choice-uncertainty was the element giving rise to an inconsistent mediation through Montgomery and Barnes’ dissonance measure as observed in Study 2. Ultimately, this indicates that decreases in post-decision choice-uncertainty consist in a potential outcome of increasing product knowledge prior to the final decision and when this outcome is true, increases in prior knowledge will reduce information search behavior following the decision-making task. However, if the acquisition of more decision-related knowledge prior to the decision-making event does not successfully reduce choice-uncertainty, prior knowledge will increase information search behavior.

Generally, the present research adds considerably to the understanding of consumers’ post-decision information search behavior. Information search during the post-decision timespan has been explained as a consequence of experiences of cognitive dissonance and feelings of regret (EHRlich et al., 1957; BETTMAN; PAYNE, 1991; SHANI; ZEELENBERG, 2006). The empirical works reported here explored both ideas, finding signs only of a contribution of cognitive dissonance to explain the intensity with which consumers

seek additional information after making their final product choice. The major contributions, however, relies on the evidences concerning how prior product knowledge, maximizing tendencies, and choice-uncertainty interplay as predictors of post-decision information seeking. Particularly, I believe this thesis shows that prior knowledge may be a relevant variable to determine post-purchase information search, but also one that brings about several new questions and deserves further academic attention. One should also notice the contribution of this thesis to literature on consumers' maximizing behaviors. A few studies have investigated this trait in post-decision settings (IYENGAR; WELLS; SCHWARTZ, 2006, MA; ROESE, 2014), but studies addressing how maximizing tendencies affect post-decision information seeking seem to be absent in prior literature.

From a broader point of view, this research amplifies the understanding of consumers' post-decision experiences. Enhancing the comprehension of these experiences may reveal a great deal of consumers' actions toward brands and products, but marketing literature often does not extends its focus from satisfaction and repurchase intention topics when addressing post-purchase issues. Marketers need to pay attention to the content and the sources of information about their products that consumers may access after the purchase event. The information they find may serve as a calibrating element for consumers' judgements, and these judgments may exert further influence on variables that are important for marketing performance, such as satisfaction and repurchase intentions themselves (ZEELLENBERG; PIETERS, 2007; SHANI; ZEELLENBERG, 2006).

Consumers can now access more information while they prepare for a decision-making task than ever before, which boosts their capacity of accumulating working knowledge to make the decision (ALBA, 1980; BRUCKS, 1985). To the extent that this knowledge can motivate post-decision information search, marketers should be prepared to provide this additional information. As pointed out by Brucks (1985), when individuals hold prior knowledge of an issue, the cost of acquiring more information decreases and the benefit of gathering further information increases. This idea suggests that the higher the prior knowledge, the more questions we can formulate about the decision made and the easier it is to conduct queries to answer these questions (JHONSON; RUSSO, 1984; BRUCKS, 1985; CARLSON, et al., 2009). My findings are in tune with this thought. Thus, marketers should not only be concerned with providing relevant information for consumers who already bought the product, but they should also be prepared to deal with knowledgeable consumers.

8. SUMMARY

Throughout this thesis, I present four *RQs* that guided the conduction of the research. In this summary, I compile these questions and present them along with short answers built on the findings I reported here.

RQ1: Does consumers' prior knowledge influence the amounts of information that consumers seek after they have made their final choice?

Answer: This question was addressed in Study 1 and again in studies 2 and 3 for greater external validity. I found that individuals' prior knowledge affect post-decision amounts of information sought. In Study 1 the effect was positive and significant. The other two studies revealed positive simple effects of moderate significance and showed that the effect is likely to be subject to a series of suppressors.

RQ2: Do maximizing tendencies increase the effect of PK on post-decision amounts of information sought?

Answer: This question was proposed for and addressed in studies 2 and 3. These studies demonstrated that individuals' levels of maximizing tendency moderate the relationship between prior knowledge and post-decision amounts of information sought. Findings indicated that for high levels of maximizing tendency, prior knowledge positively affects the amount of information sought. In contrast, I observed null effects at maximizing tendencies levels that would characterized satisficers – although some estimates were negative and of moderate significance at these levels (Study 3). Thus, the proposed interaction (of prior knowledge with maximizing tendency) exists.

RQ3: What is the role of cognitive dissonance in the relationship between prior knowledge and post-decision amounts of information sought?

Answer: I investigated the role of cognitive dissonance in the main relationship as a possible mediating variable of the effects of prior knowledge on post-choice information search. Results exposed that cognitive dissonance is an important factor to predict post-decision information search, but it does not conduct an indirect effect of prior knowledge.

RQ4: Do consumers also search for information as a function of prior knowledge after they experienced their final choice?

Answer: In Study 3, I made evident that participants' prior knowledge affect the amounts of information they sought after having used or experienced their purchase. As with Study 2 (where participants had not yet experienced their choice), this effect is nonsignificant when the model is composed only of prior knowledge as a predictor, achieving moderate significance as other predictors are introduced to the regression. Another similarity is that I found a significant interaction effect indicating that the positive relationship between prior knowledge and information seeking exists among maximizers. Taken together, studies 2 and 3 show that post-decision information search is likely to be similarly affected by consumers' prior knowledge during the timespan prior to experiencing the chosen option and afterwards.

Although not anticipated, results of Study 2 brought to light the possibility to explore the role of uncertainty toward choice accuracy, or choice-uncertainty, in the focal relationship of my research. I found that choice-uncertainty helps understanding how prior knowledge relates to post-decision information search because it suppresses the positive effect of prior knowledge. More precisely, when prior knowledge reduces uncertainty, as a downstream consequence it reduces post-decision information seeking, contradicting the total effect that prior knowledge exerts on information seeking.

9. RESEARCH LIMITATIONS

As with every research, this one has a few limitations on which one should reflect. Some of these limitations concern methodological aspects of the studies presented here, whereas others may be source of insights for future projects, for they relate to new research questions that emerged but were not addressed here.

Turning attention to real purchases served to increase external validity of the findings. However, extending the studies reported here with additional experiments could provide a clearer glance at the phenomena observed in Study 2 and 3, especially because the experimental procedure led to a significant effect of prior knowledge without a need to account for additional variables as predictors. For instance, Study 1 could be adapted so that participants would experience their choices before the information search activity, which would allow an assessment of post-experience information search behavior. Similarly, measures of maximizing tendencies, choice-uncertainty, cognitive dissonance, and satisfaction could also be introduced to the experimental procedure.

Along with using real purchases, a major shift from Study 1 to the other two studies relies on the knowledge class paradigm, which turned from objective (in Study 1) to subjective (in studies 2 and 3). The fact that studies 2 and 3 showed nonsignificant effects of prior knowledge in the simplest models (one predictor) whereas Study 1 indicated a clearly significant effect when examining only one predictor could be partially explained by this shift. Adapting the design used in Study 1 to account for a subjective vs. objective factor could address the possibility of objective knowledge exerting a more resilient effect on post-decision information search than subjective knowledge.

Additionally, across studies 2 and 3, the measures for prior knowledge and maximizing tendencies were the same. Results could be further validated with replications varying in those measures. This might be an important step to strengthen the conclusions drawn from those studies because, as observed with cognitive dissonance, scales can influence the results. Similarly, although a measure for satisfaction (as in Study 3) should approximate to feelings of regret, other scales could be adopted for this purpose (e.g., BREHAUT et al., 2003). The fact that I used a measure of satisfaction might be one of the reasons why my conclusion about effects of regret are not in line with the findings of Shani and Zeelenberg (2006).

For further support to my findings on how choice-uncertainty changes the effect of prior knowledge on information seeking, a study wherein participants (have) experience(d) their

choice could account for a choice uncertainty measure. My inquiry on the role of uncertainty was conducted with data from Study 2, in which participants had not used their products yet. However, experiencing their purchases could attenuate uncertainty and, maybe, its role in changing the effect of prior knowledge.

Finally, findings of this thesis should inspire future work within the ‘post-decision information search’ theme, particularly involving effects of prior knowledge. For instance, one of my conclusions is that choice-uncertainty suppresses the effect of prior knowledge on information seeking, but there might be other important suppressors that, when accounted as predictors along with prior knowledge, choice-uncertainty, and maximization tendencies, might reinforce the total effect of prior knowledge. Future research could identify and explore variables that can operate this way, particularly the capacity of these variables of creating negative effects – which might enlighten the reason why negative effects of prior knowledge are predicted in prior literature. Another important gap is the mechanism for the positive effect of prior knowledge on post-decision information seeking, which represents an important extension to the findings of this research.

10. APPENDIX

10.1 APPENDIX STUDY 1

Condition absence of Prior Knowledge:

In this task, you will win a password to access free online games developed to improve your reasoning capability!

Below, you will find three games that are recommended to sharpen cognitive processes of logic, problem solving, reasoning, imagination, and concentration. Playing these games in your spare time can help you in your work and daily activities.

Please, choose the game that you consider the best for you. After making your choice and answering a short survey, you will receive a link to an intelligence games website and a password that will give you free online access to the game you chose on the website for one month.

You can choose just ONE game to receive a password.

Which game do you choose?

The Towers of Hanoi



Mental Rotation



Logic Puzzle



Condition Presence of Prior Knowledge:

In this task, you will win a password to access free online games developed to improve your reasoning capability!

Below, you will find three games that are recommended to sharpen cognitive processes of logic, problem solving, reasoning, imagination, and concentration capability. Playing these games in your spare time can help you in your work and daily activities.

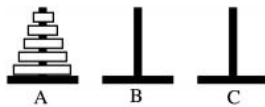
Please, choose the game that you consider the best to you. After making your choice and answering a short survey, you will receive a link to an intelligence games website and a password that will give you free online access to the game you chose on the website for one month.

You can choose just ONE game to receive a password. Please read the information about each game before making your choice.

The Towers of Hanoi

How to play: You must configure colored/numbered rings on a series of pegs in order to match a configuration required by the computer. You can move the top-most ring on each peg to another peg, but you can only move one ring at a time.

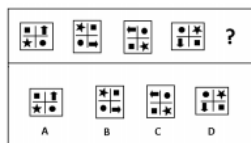
This game requires problem-solving skills that call on the brain's executive functions. You must define a strategy to reach a desired outcome, calculate the right moves to reach the solution in the shortest time possible, and remember the rules of the exercise. Training this kind of thinking helps improving your analysis and problem-solving capabilities. It can help making your job in easier ways and solving tasks of your daily life. The area of the brain at play is important for the "higher cognitive functions."



Logic Puzzle

How to play: You need to find the logic behind a question and choose the best answer considering the logic you thought of. It is important that carefully analyze what the question asks and make associations before choosing your answer.

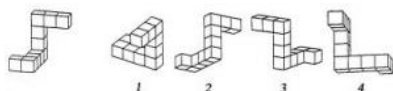
This game requires logic skills that call on the brain's deductive functions. You need to think and analyze the question to find the correct answer in the shortest time possible, figuring out the logic proposed by the question. Training this kind of thinking helps improving your concentration and your logic thinking. It can help you finding concentration to do your job and think about problems in a logic way. The area of brain at play is important for the "higher cognitive functions."



Mental Rotation

How to play: The game presents a figure and you need to find the rotated representation in a set containing similar figures. First of all, it is important that you analyse the figure that will be rotated, then you choose the correct representation.

This game requires memory skills that call on the brain's cognition functions. You must try to visualize the figure in your mind, think about the right rotation movement to reach the solution in the shortest time possible, and remember the originate figure. Training this kind of thinking helps improving your visualization and reasoning capabilities. It can help making your job in a more creative way and reasoning better while carrying out daily tasks. The area of brain at play is important for the "higher cognitive functions."



10.2 APPENDIX - STUDY 1

a) Scales

Involvement measurement adapted from Mittal (1989). Seven-point scale, 2 items.

- 1) How important was it to you to make a right choice of this purchase? (1 = “*Not at all*”; 7 = “*Extremely important*”)
- 2) In making your selection of this purchase, how concerned were you about the outcome of your choice? (1 = “*not at all concerned*”; 7 = “*Very much concerned*”)

10.3 APPENDIX - STUDY 2

a) Scales

Maximizing Tendency measurement from Schwartz and colleagues (2002). Seven-point scale (1 = “*I strongly disagree*”; 7 = “*I strongly agree*”), 13 items.

- 1) When I watch TV, I channel surf, often scanning through the available options even while attempting to watch one program.
- 2) When I am in the car listening to the radio, I often check other stations to see if something better is play.
- 3) I treat relationships like clothing: I expect to try a lot on before I get the perfect fit.
- 4) No matter how satisfied I am with my job, It only right for me to be on the lookout for better opportunities.
- 5) I often fantasize about living in ways that are quite different from my actual life.
- 6) I am a big fan of lists that attempt to rank things (the best movies, the best singers).
- 7) I often find it difficult to shop a gift for a friend.
- 8) When shopping, I have hard time finding clothing that I really love.
- 9) Browsing for videos to watch is really difficult for me. I am always struggling to pick the best one.
- 10) I find writing is difficult, even if it is just writing a letter to a friend, because it is so hard to word things just right. I often do several drafts of even simple things.
- 11) No matter what I do, I have the highest standards for myself.
- 12) I never settle for the second best.
- 13) Whenever I am faced with a choice, I try to imagine what all the other possibilities are, even ones that are not present at the moment.

Cognitive dissonance measurement adapted from Montgomery and Barnes (1993). Seven-point scale (1 = “*I strongly disagree*”; 7 = “*I strongly agree*”), 11 items (a-h: choice-uncertainty items; i-k: desire to acquire new information items):

- a) I feel that I will be happy with my purchase.
- b) I am sure that I will be pleased with the way this purchase performs.
- c) I am comfortable with the purchase decision I made.
- d) I am uneasy about the purchase decision that I made.
- e) I am confident that I made the “right” choice when I made this purchase.
- f) I would probably make this purchase again in the future.
- g) I felt that I got a “good deal” when I made this purchase.
- h) This purchase will probably do a good job of meeting my important needs.
- i) I would probably talk to my friends or family to ask them if they think I made a wise choice with this purchase.
- j) I would probably pick up a copy of Consumers Reports to make sure this purchase I bought received high ratings.
- k) I feel like checking online reviews to make sure this purchase I made received high ratings.

b) Correlation analysis

Table 5 - Correlation analysis: variables from Study 2

		PK	CD	MT	AIS
PK	Pearson Correlation	1	-,242*	-,076	,095
	Sig. (2-tailed)		,015	,453	,345
CD	Pearson Correlation	-,242*	1	,271**	,331**
	Sig. (2-tailed)	,015		,006	,001
MT	Pearson Correlation	-,076	,271**	1	,209*
	Sig. (2-tailed)	,453	,006		,036
AIS	Pearson Correlation	,095	,331**	,209*	1
	Sig. (2-tailed)	,345	,001	,036	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Source: author (2016).

10.4 APPENDIX - STUDY 3

a) Scales

Cognitive dissonance measurement from Sweeney and colleagues (2000). Seven-point scale (1 = *I strongly disagree*; 7 = *I strongly agree*), 21 items.

After I bought this purchase:

- a) I was in despair.
- b) I resented it.
- c) I felt scared.
- d) I felt hollow.
- e) I felt angry.
- f) I felt uneasy.
- g) I felt I would left myself down.
- h) I felt annoyed.
- i) I felt frustrated.
- j) I was in pain.
- k) I felt depressed.
- l) I felt furious with myself.
- m) I felt sick.
- n) I was in agony.
- o) I wonder if I really need this product.
- p) I wonder whether I should have bought anything all.
- q) I wonder if I have made the right choice.
- r) I wonder if I have done the right thing in buying this product.
- s) After I bought this product I wondered If they had spun me a line.
- t) After I bought this product I wondered whether there was something wrong with the deal I got.

Satisfaction measurement adapted from Oliver (2014). Seven-point scale (1 = *I strongly disagree*; 7 = *I strongly agree*), 4 items.

- a) I am very satisfied with this purchase.
- b) I am really satisfied with my capability to make excellent choices when it to comes to purchases of this sort.
- c) I am very satisfied with the way this purchased performed.
- d) This purchase performed in accordance with the expectations I had prior to the purchase.

b) Correlation analysis

Table 6 - Correlation analysis: variables from Study 3

		PK	CD	MT	AIS
PK	Pearson Correlation	1	,066	,078	,156
	Sig. (2-tailed)		,506	,427	,112
CD	Pearson Correlation	,066	1	-,054	-,299**
	Sig. (2-tailed)	,506		,585	,002
MT	Pearson Correlation	,078	-,054	1	,222*
	Sig. (2-tailed)	,427	,585		,023
AIS	Pearson Correlation	,156	-,299**	,222*	1
	Sig. (2-tailed)	,112	,002	,023	

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Source: author (2016).

11. REFERENCES

- ALBA, J. W. The Effects of Product Knowledge on the Comprehension, Retention, and Evaluation of Product Information. In: Bagozzi, R. P.; Tybout, A. M.; Arbor, A., Ed(s). *Advances of Consumer Research*, MI: Association for Consumer Research, 1983. p. 577-580.
- ALBA, J. W.; HUTCHINSON, J. W. Knowledge Calibration: What Consumers Know and What They Think They Know. **Journal of Consumer Research**, v.27, p. 123- 156, 2000.
- BETTMAN, J. R; PARK, C. W. Effects of Prior Knowledge and Experience and Phase of the Choice Process on Consumer Decision Processes: A Protocol Analysis. **Journal of Consumer Research**, v. 7, p. 234-248, 1980.
- BETTMAN, J. R.; JOHNSON, E. J. Eric J.; PAYNE, J. W. Consumer Decision Making. In Robertson, T. S.; KASSARJAN, H. H., Ed(s). *Handbook of Consumer Behavior*. Chicago: Prentice Hall College, 1990.
- BETTMAN, J. R; LUCE, M. F.; PAYNE, J. W. Constructive Consumer Choice Processes. **Journal of Consumer Research**, v. 25, p. 187-217, 1998.
- BLOCH, P. H; SHERRELL, D. L.; RIDGWAY, N. M. Consumer Search: An Extended Framework. **Journal of Consumer Research**, p. 119-126, 1986.
- BREHAUT, J. C.; O'CONNOR, R. N.; WOOD, T. J.; HACK, T. F.; SIMINOFF, L.; GORDON, E.; STEWART, D. F. Validation of a Decision Regret Scale. **Medical Decision Making**, p. 281-292, 2003.
- BRUCKS, M. The Effects of Product Class Knowledge on Information Search Behavior. **Journal of Consumer Research**, v. 12, p. 1-16, 1985.
- CARRILLAT, F. A.; LADIK, D. M.; LEGOUX, R. When the Decision Balls Keeps Rolling: An Investigation of the Sisyphus Effect Among Maximizing Consumers. **Marketing Letters**, v. 22, p. 283-296.
- CARLSON, J. P.; VINCENT, L. H.; HARDESTY, D. M.; BEARDEN, W. O. Objective and Subjective Knowledge Relationships: A Quantitative Analysis of Consumer Research Findings. **Journal of Consumer Research**, v.35, p. 864-876, 2009.
- CARMON, Z.; WERTENBROCH, K.; ZEELENBERG, M. Option attachment: When Deliberating Makes Choosing Fell Like Losing. **Journal of Consumer Research**, v.30, p. 15-29.
- CERIN, E.; MACKINNON, D. P. A commentary on current practice in mediating variable analyses in behavioral nutrition and physical activity. **Public health nutrition**, v. 12, p. 1182-1188, 2009.

CHANG, S. J.; WITTELOOSTUIJN, A. V. & EDEN, L. From the Editors: Common method variance in international business research. **Journal of International Business Studies**, v. 41, p. 178-184, 2010.

CONGER, A. J. A Revised Definition for Suppressor Variables: A Guide to Their Identification and Interpretation. **Educational Psychological Measurement**, v.34, p. 35-46, 1974.

DONNELLY, J. H.; IVANCEVICH, J. M. Post-Purchase Reinforcement and Back-Out Behavior. **Journal of Marketing Research**, v. 7, p. 399-400, 1970.

EHRlich, D.; GUTTMAN, I.; SCHÖNBACH, P.; MILLS, J. Postdecision Exposure to Relevant Information. **The Journal of Abnormal and Social Psychology**, v.54, n. 1, 1957.

FESTINGER, L. Cognitive Dissonance. **Scientific American**, v.207, p. 93-102, 1964.

FILED, Andy. *Discovering Statistics Using IBM SPSS Statistics*. 4th edition. California: SAGE, 2013.

FOSTER, A. A nonlinear Model of Information-Seeking Behavior. **Journal of The American Society for Information Science and Technology**, v.55, p. 228-237, 2004.

GRANT, R.; CLARKE, R. J.; KYRIAZIS; E. A review of factors affecting online consumers search behavior from an information value perspective. **Journal of Marketing Management**, v. 23, p. 519-533, 2007.

GUO, C. A Review on Consumer External Search: Amount and Determinants. **Journal of Business and Psychology**, v. 15, p. 505-519, 2001.

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

IYENGAR, S. S.; WELLS, R. E.; SCHWARTZ, B. Doing Better But Feeling Worse. **Psychological Science**, v. 17, p. 143-150, 2006.

JOHNSON, E.; RUSSO, E. J. Product Familiarity and Learning New Information. **Journal of Consumer Research**, v. 24, p. 246-256, 1996.

JONES, E. H. A Cognitive Dissonance Theory Perspective on Persuasion. In: Dillard, J.; Pfau M., Ed(s). *The persuasion handbook: Developments in theory and practice*. CA: SAGE Publications, 2002. p. 99-117.

JONES, M. A.; MOTHERSBAUGH, D. L.; BEATTY, S. E. Switching Barriers and Repurchase Intentions in Services. **Journal of Retailing**, v.76, p. 256-274, 2000.

KIEL, G. C.; LAYTON, R. A. Dimensions of Consumer Information Seeking. **Journal of Marketing Research**, v. 18, p. 233-239, 1981.

LIPSHITZ, R.; STRAUSS, O. Coping with Uncertainty: A Naturalistic Decision-Making Analysis. **Organizational Behavior and Human Decision**, v. 69, p. 149-163, 1997.

MA, J.; ROESE, N. J. The Maximizing Mind-Set. **Journal of Consumer Research**, v. 41, p. 71-92, 2014.

MACKINOON, D. P.; KRULL, J. L.; LOCKWOOD, C. M. Equivalence of the Mediation, Confounding, and Suppression Effect. **Prevention Science**, v. 4, p. 173-179, 2000.

MITTAL, B. Measuring purchase-decision involvement. **Psychology & Marketing**, p. 147-162, 1989.

MONTGOMERY, C.; BARNES, J. H. POSTDIS: A Short Rating Scale for Measuring Postpurchase Dissonance. **Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior**, v. 6, p. 204-216, 1993.

MOORE, W. L.; LEHMANN, D. R. Individual Differences in Search Behavior for a Nondurable. **Journal of Consumer Research**, v. 7, p. 296-307, 1980.

MOORMAN, C.; DIEHL, K.; BRINBERG, D.; KIDWELL, B. Subjective Knowledge, Search Locations, and Consumer Choice. **Journal of Consumer Research**, v.31, p. 673-680, 2004.

MOORTHY, S.; RATCHFORD, B. T.; TALUKDAR, D. Consumer Information Search Revisited: Theory and Empirical Analysis. **Journal of Consumer Research**, v.23, p. 263-277, 1997.

NEWMAN, J. W.; STAELIN, R. Prepurchase Information Seeking for New Cars and Major Household Appliances. **Journal of Marketing Research**, v. 9, p. 249-257, 1972.

OLIVER, R. L. *Satisfaction: A Behavioral Perspective on the Consumer*. New York: Routledge, e-book, 2014.

NELSON, P. Information and consumer behavior. **Journal of political economy**, 311-329, v.78, 1970.

PARK, C. W.; MOTHERSBAUGH, D. L.; FEICK, L. Consumer Knowledge Assessment. **Journal of Consumer Research**, p. 71-82, 1994.

PETTIGREW, K. E.; FIDEL, R.; BRUCE, H. Conceptual Frameworks in Information Behavior. **Annual Review of Information Science and Technology**, v.35, p. 43-78, 2001.

PETTY, R. E.; CACIOPPO, J.T; KAO, C. F.; The efficient assessment of need for cognition. **Journal of Personality Assessment**, v. 48, p. 306-307.

PUNJ, G. N.; STAELIN, R. A Model of Consumer Information Search Behavior for New Automobiles. **Journal of Consumer Research**, p. 336-380, 1983.

- RADECKI, C. M.; JACCARD, J. Perceptions of Prior Knowledge, Actual Knowledge, and Information Search Behavior. *Journal of Experimental Social Psychology*, v.31, p. 107-138, 1995.
- RAJU, P. S.; LONIAL, S. C.; MANGOLD, W. G. Differential Effects of Subjective Knowledge, Objective Knowledge, and Usage Experience on Decision Making: An Exploratory Investigation. *Journal of Consumer Psychology*, v.4, p. 153-180, 1995.
- RUCKER, D.D.; PREACHER, K. J.; TORMALA, Z. L.; PETTY, R. E. Mediation Analysis in Social Psychology: Current Practices and New Recommendations. *Social and Personality Psychology Compass*, p. 359-387, 2011.
- SCHMIDT, J. B.; SPRENG, R. A. A Proposed Model of External Consumer Information Search. *Journal of the Academy of Marketing Science*, v.24, p. 246-256, 1996.
- SCHWARTZ, B.; WARD, A.; MONTEROSSO, J.; LYUBOMIRSKY, S.; WHITE, K.; LEHMAN, D. R. Maximizing versus satisficing: happiness is a matter of choice. *Journal of Personality and Social Psychology*, v.83, p. 1178-1197, 2002.
- SHANE, S. Prior Knowledge and the Discovery of Entrepreneurial Opportunities. *Organization Science*, v.11, p. 448-469, 2000.
- SHANI, Y.; ZEELENBERG, M. When and Why Do We Want to Know? Experienced Regret Promotes Post-Decision Information Search. *Journal of Behavioral Decision Making*, p. , 2006.
- SHETH, J. N.; MITTAL, B.; NEWMAN, B. I. *Customer behavior: consumer behavior and beyond*. Fort Worth, TX: Dryden Press, 1999.
- SIMON, H. A. Rational Choice and the Structure of the Environment. *Psychological Review*, v. 63, n. 2, p. 129-138, 1956.
- SIRINIVASAN, N.; RATCHFORD, B. T. An Empirical Test of a Model of External Search for Automobiles. *Journal of Consumer Research*, v. 18, p. 233- 242, 1991.
- SPILLER, S. A.; FITZSIMOS, G. J.; LYNCH, JR.; McCLELLAND, G. H. Spotlights, Floodlights, and the Magic Number Zero: Simple Effects Tests in Moderated Regression. *Journal of Marketing Research*, v. L, p. 277-288, 2013.
- SUJAN, M. Consumer Knowledge: Effects on Evaluation Strategies Mediating Consumer Judgments. *Journal of Consumer Research*, v.12, p. 31-46.
- SWEENEY, J. C.; HAUSKNECHT, D.; SOUTAR; G. N. Cognitive Dissonance after Purchase: A Multidimensional Scale. *Psychology and Marketing*, v. 17, p. 369-385, 2000.
- WILSON, T. D. Human Information Behavior. *Informing Science*, v. 3, n. 2, p. 49-55, 2000.

WILSON, T.D. On users studies and information needs. **Journal of Documentation**, v.62, p.658-670, 2006.

ZEELLENBERG, M.; PIETRES, R. A Theory of Regret Regulation. **Journal of Consumer Psychology**, v. 17, p. 3-18, 2007.