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**METAS DO CONSUMIDOR: A INFLUÊNCIA DE METAS DE BENEFÍCIO NA
EXECUÇÃO DE METAS DE PROCESSO**

**CONSUMER GOAL PURSUIT: THE INFLUENCE OF BENEFIT GOALS ON THE
EXECUTION OF PROCESS GOALS**

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ABSTRACT

Decision process goals (e.g., maximize accuracy, minimize effort) determine the number of options considered prior to making a purchase. Four experiments are used to provide evidence that the relationship between benefit goals influences the execution of decision process goals. When benefit goals are in conflict (e.g., purchase a prestigious, thrifty car), it becomes more difficult to pursue a decision process goal. Consequently, search ends earlier (later) when a person is trying to maximize accuracy (minimize effort). When benefit goals are complementary (i.e., purchase a prestigious, fun car), it becomes easier to pursue a decision process goal. Consequently, search ends later when a person is trying to maximize accuracy, but there is no effect on the execution of the minimize effort goal due to a floor effect. These effects imply that decision process goals are pursued using decision process means (e.g., evaluative activities, comparison activities) that can become more or less efficacious as search proceeds.

Keywords: Consumer Behavior, Marketing, Experimental Design, Consumer Goal Pursuit

RESUMO

Metas de processo decisório (e.g., maximizar a precisão ou minimizar o esforço em uma escolha) determinam o número de opções consideradas antes de uma compra. Quatro experimentos são utilizados como evidência para mostrar que a relação entre as metas de benefício influencia na execução de metas de processo decisório. Quando metas de benefício estão em conflito (e.g., comprar um carro de prestígio, mas barato), torna-se mais difícil de se executar metas de processos decisórios. Consequentemente, a busca de informações termina antes (depois) quando uma pessoa está tentando maximizar a precisão (minimizar o esforço) em uma decisão. Quando metas de benefício são complementares (e.g., comprar um carro de prestígio e divertido), torna-se mais fácil de se executar metas de processo. Consequentemente, a busca de informações termina depois quando uma pessoa está tentando maximizar a precisão de uma decisão, mas não há efeito na execução da meta de minimização de esforço devido a um efeito de piso. Esses efeitos implicam que metas de processo decisório são possuídas com a utilização de meios de processo decisório (e.g., atividades de avaliação e de comparação) que podem se tornar menos ou mais eficazes na medida em que a busca de informações continua.

Palavras-chave: Comportamento do consumidor, Marketing, Desenho Experimental, Metas do consumidor

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1 INTRODUCTION

Consumer behavior is goal-driven (Bagozzi and Dholakia 1999; Laran 2016). Goals influence consumer choices not only by setting outcome priorities (e.g., a consumer with an eat healthy goal is more likely to choose an apple than a piece of cake), but also by managing the approach to goal pursuit (e.g., a consumer with a maximize accuracy goal will engage in more extensive information search before making a choice) (Bettman, Luce, and Payne 1998; Kunda 1990; van Osselaer et al. 2005). We will refer to the first class of goals as benefit goals and to the second class of goals as decision process goals.

The most prominent decision process goals are minimize decision effort and maximize decision accuracy (Beach and Mitchell 1978; Bettman et al. 1998; Payne, Bettman, and Johnson 1993). Historically, research on the effort-accuracy framework has focused on how the maximize accuracy and minimize effort goals lead to the adaptive use of decision strategies (Bettman et al. 1998; Payne, Bettman, and Johnson 1988). When consumers are motivated to be accurate, they (1) attend to more alternatives, (2) focus on the most relevant attributes, (3) process attribute information more deeply, (4) expend more cognitive effort on issue-related reasoning, and (5) use more complex decision strategies (Bettman et al. 1998; Kunda 1990). When consumers are motivated to minimize effort, they tend to consider fewer alternatives and fewer features of each alternative (Tyszka 1998).

Given the breadth of research that has been done on consumer goal pursuit (Baumgartner and Pieters 2008; Kopetz et al. 2012; Kruglanski et al. 2002; Wallace and Etkin 2017), there is surprisingly little research on the interaction between benefit goals and decision process goals. Many implicitly assume that these two classes of goals independently contribute to goal pursuit – benefit goals define the utility function and decision process goals determine the strategy used to make a choice (Bettman et al. 1998). This research challenges this assumption. We propose that one can gain insight into how the characteristics of benefit goals can influence the execution of process goals by measuring the degree of search. We use a sequential, stimulus-based choice paradigm in which people consider alternatives until they find an acceptable alternative. We find that conflicting benefit goals interfere with the pursuit of both a maximize decision accuracy goal and a minimize decision effort goal. Furthermore, we show that complementary benefit goals facilitate the pursuit of a maximize accuracy goal, but not a minimize effort goal.

We attribute the influence of benefit goals on the execution of decision process goals to the reduced efficacy of decision process means in each additional round of search. The pursuit of a decision process goal typically involves the repeated execution of a series of decision-process activities (i.e., means), including evaluating new alternatives and comparing these new alternatives to existing alternatives.

When conflicting benefit goals are active, the decision criteria become more ambiguous and the decision process activities become more difficult to execute. This makes it harder to pursue a maximize accuracy goal. Consequently, fewer alternatives are considered. This also makes it harder to pursue a minimize effort goal because it becomes harder to be efficient. Consequently, more alternatives are considered. In contrast, when complementary benefit goals are active, the decision criteria become clearer and decision process activities become easier to execute as search proceeds. This makes it easier to pursue a maximize accuracy goal and increases search. This also makes it easier to pursue a minimize effort goal and should reduce search, though this effect is often not observed owing to the difficulty of making an efficient decision process more efficient (i.e., a floor effect).

2 THEORETICAL BACKGROUND

2.1 The Goal Construct

Goals are a central concept in motivation science. Given the goal term pervasiveness, some authors claim that “*it is surprising how little the precise nature of the term goal has been explicitly discussed in the literature.*” (Elliot and Fryer 2008, p. 235) and that goal is a “*notoriously ill-defined term*” (Heckhausen and Kuhl 1985, p. 137). The list of theories that incorporate goal constructs is extremely broad. See Table 1 for a Chronological Sequence of Theories Positing Goal-Like Constructs, adapted from Austin and Vancouver (1996, p. 339):

Table 1 - Chronological Sequence of Theories Positing Goal-Like Constructs, adapted from Austin and Vancouver (1996, p. 339)

Theory	Studies
"Conscious attitudes"	Ach (1905), Kuhl and Beckmann (1985)
Level of aspiration	Hoppe (1930), Siegel (1957)
Secondary incentives	Mace (1931)
Perceptual control theory	McClelland (1994), Wiener (1948)
Achievement need	Murray (1938)
Social learning theory	Bandura (1986), Dweck and Leggett (1988)
Plans and images	Miller et al. (1960)
Theory of reasoned action	Fishbein (1967), Fishbein and Ajzen (1975)
Cybernetic control theory	Carver and Scheier (1982)
Cognitive evaluation theory	Deci (1980), Deci and Ryan (1985)
Symbolic self-completion	Wicklund and Gollwitzer (1982)
Personal projects	Little (1983), Palys and Little (1983)
Goal energization	Wright and Brehm (1989)
Theory of planned behavior	Ajzen (1985, 1991)
Action control theory	Frese and Sabini (1985), Kuhl (1992)

Personal strivings	Emmons (1986, 1989)
Possible selves	Markus and Nurius (1986)
Action identification theory	Vallacher and Wegner (1987)
Self-constructing systems	Ford (1987)
Industrial goal setting	Locke and Latham (1990)
Intentions	Bratman (1987), Gollwitzer (1993)
Unconscious goal pursuit	Bargh (1990), Chartrand and Bargh (1996)
Image theory	Beach and Mitchell (1990)
Set points	Trehub (1991)
Goal categories	Basarlou (1991)
Goal-based scenarios	Schank (1993)
Knowledge structures	Kruglanski (1996)
Choice goals framework	Bettman, Luce, and Payne (1998)
Implementation Intentions	Gollwitzer (1999)
Goal systems theory	Kruglanski et al. (2002)
Multiple goal pursuit	Louro and Zeelenberg (2007)

Research on goals in social psychology has developed mainly on the notion that goals are pursued consciously, that is, when the individual is aware that the goal is active. The conscious goal pursuit framework is concerned mainly with goal setting (what makes people set themselves certain goals of a certain content of certain structure) and goal striving (how certain goals are attained or not). Later, a different stream of research has been developed by Bargh (1990), positing that goals can also be automatically activated by the environment and be pursued without awareness, intent, or control. In this research, we use a conscious goals framework.

Research investigating goals in consumer psychology has been growing, especially after 2000. On a historical analysis of the *Journal of Consumer Research*, Wang et al. (2015) showed that self-control and goal pursuit are among the most used words from 2004 to 2014.

For a complete analysis of the historical and linguistic roots of goals, refer to Elliot and Fryer (2008). For an integrated, across domain analysis of the goal construct, refer to Austin and Vancouver (1996). For a framework to understand what goal are and how they influence human experience and behavior, refer to Fishbach and Ferguson (2007). For a discussion on the interplay between conscious and unconscious goal pursuit, refer to Bargh, Gollwitzer, and Oettingen (2010), Laran (2016), and Laran, Janiszewski, and Salerno (2016). See also Baumgartner and Pieters (2008) and van Osselaer and Janiszewski (2012) for a more consumer-relevant theory on goals.

In this research, we consider goals as desired outcomes cognitively represented in memory as semantic knowledge (Kruglanski 1996; Kruglanski et al. 2002; van Osselaer and Janiszewski 2012). However, unlike semantic concepts, goals also have motivational properties. As such, goals are concepts that encourage behavior (van Osselaer and Janiszewski 2012). The organization of goal concepts in memory consists of interlinked nodes between goals and means with varying degrees of association from one to another (Kruglanski et al. 2002). Means are opportunities to execute a behavior that will satisfy a goal (Laran and Janiszewski 2009). A determinant of goal accessibility in memory is goal activation (Dijksterhuis, Chartrand, and Aarts 2007; Kruglanski 1996; Kruglanski et al. 2002). Goal activation has been linked to persistence in pursuing goals (Fitzsimons et al. 2008; Koo and Fishbach 2010; Laran, Janiszewski, and Cunha Jr. 2008). Also, goals with higher levels of activation are weighted more heavily in the evaluation and selection of means (Bargh et al. 2001; Laran et al. 2008; Laran and Wilcox 2011).

Importantly, goals vary in a number of overlapping dimensions (Austin and Vancouver 1996). For instance, goals can operate at different levels of abstraction, from rather general (e.g., the goal to eat healthy) to more specific (e.g., the goal to eat less fatty foods). Goals can have a performance level (e.g., the goal to lose 4 pounds in two weeks) or not (e.g., the goal to lose weight in the next two weeks). Goals can be set with single numbers (e.g., save \$100 a month) or high-low range numbers (e.g., save between \$50 and \$150 a month) (Scott and Nowlis 2013). Goals can be inhibitional, i.e., goals which a person is trying to decrease a behavior (e.g., reduce daily caloric intake) or acquisitional, i.e., goals which a person is trying to increase a behavior (e.g., go to the gym frequently) (Cochran and Tesser 1996). Goals can be related to psychological (e.g., need for achievement, cognition, closure), social (e.g., status, prestige), emotional (e.g., happiness, excitement, relaxation), hedonic (e.g., pleasure) or physiological (e.g., hydration, alertness) needs (van Osselaer and Janiszewski 2012).

All the aforementioned goals drive outcome priorities during goal pursuit. On the basis of goal-based model of product evaluation and choice (van Osselaer et al. 2005; van Osselaer and Janiszewski 2012), goals are desirable benefits that can be attained by consuming specific means. Means are behaviors, products, and services that allow a consumer to pursue one or more goals and choice is the selection of one or more means from a larger set of available means. For instance, a consumer with a goal to eat something healthy (i.e., a benefit goal) can attain this goal by choosing a healthy product such as an apple (i.e., a means) instead of an unhealthy product such as a piece of cake (i.e., another means). A consumer with a prestige goal (i.e., benefit) can attain this goal, at least temporarily, by choosing an expensive restaurant (i.e., a means) instead of a cheap one (i.e., another means).

2.2 Benefit Goals

As mentioned in the previous section, benefit goals are desirable outcomes that are represented in a semantic knowledge structure (Kruglanski 1996; Kruglanski et al. 2002; van Osselaer and Janiszewski 2012). Benefit goals can be attained using efficacious means. Means are products, behaviors, and services that allow a consumer to pursue one or more benefit goals. When people have a single active goal, they tend to select means that are most efficacious for pursuing that goal (Kruglanski et al. 2002). When people have multiple active goals, they tend to select means that provide the most utility given the active goals (van Osselaer and Janiszewski 2012). This can be a compromise option if the choice is a one-time event or a series of more polarized options (e.g., choice consistency, balancing) if the choice is repeated over time (Dhar and Simonson 1999; Laran and Janiszewski 2009).

Means can be considered under different circumstances. Means can be memory-based, stimulus-based, or a mix of memory-based and stimulus-based (Lynch and Srull 1982). Means can also be considered simultaneously or sequentially (Honka and Chintagunta 2017; Simonson 1990). Research into memory-based choice investigates the cues that encourage people to retrieve specific means as well as information about these means (Kardes, Posavac, and Cronley 2004; Lynch, Marmorstein, and Weigold 1988; Nedungadi 1990). Research into stimulus-based choice emphasizes the processes people use acquire, represent, and integrate the available information as well as the impact of information presentation format on these processes (Anderson 1981;

Bettman, Capon, and Lutz 1975; Johnson et al. 2012; Kleinmuntz and Schkade 1993; Lynch 1985). Simultaneous choice occurs when all means are available for consideration at the time of choice.

Critical findings are that contexts, frames, and preference solicitation methods can influence the choice among a constant set of alternatives (Bettman 1975; Klesse, Levav, and Goukens 2015; Levin, Schneider, and Gaeth 1988; Schkade and Johnson 1989; Slovic 1995). Sequential choice occurs when means are considered one at a time (Grether and Wilde 1984; Häubl, Dellaert, and Donkers 2010). The amount of information search is sensitive to time availability (Beatty and Smith 1987), the complexity of the information (Grether and Wilde 1984), confidence about the benefits offered by alternatives (Duncan and Olshavsky 1982; Urbany, Dickson, and Wilke 1989), involvement with the product category (Beatty and Smith 1987; Brucks 1985), and the motivation for search (Patalano et al. 2015).

Particularly important for this research is the stopping point in sequential, stimulus-based choice. How is it that people decide to discontinue the consideration of additional alternatives and make a choice from among the alternatives they have already been reviewed? Shugan (1980) argues that people search until the cost of additional information acquisition exceeds the anticipated benefit from the information (see also Adam 2001; Weitzman 1979). Moorthy, Ratchford, and Talukdar (1997) further contend that knowledge about how to map product attributes to product benefits moderates the perceived value of additional search. Knowledge can be used to make inferences about the expected value of considering a new alternative or the representativeness of previously considered alternatives (Honka and Chintagunta 2017).

The decision to terminate the consideration of additional options has been attributed to encountering an unexpectedly superior option (Hey 1982, 1987), the relative attractiveness of the most recent option (Häubl, Dellaert, and Donkers 2010), the trend in the value of considered options (Zwick et al. 2003), and localized stopping cutoffs (Adam 2001; Phipps and Meyer 1985).

2.3 Decision Process Goals

Importantly as understanding how benefit goals drive outcome (i.e., means) priorities during goal pursuit, it is understanding why consumer choice processes take certain forms (Bettman et al. 1998). In addition to the benefit goals, consumers also strive to satisfy decision process goals

(Carlson et al. 2014; van Osselaer et al. 2005). Decision process goals determine how a person gathers and assesses information when making a choice (Bettman et al. 1998; Carlson et al. 2014; van Osselaer et al. 2005). For instance, individuals may strive to make a good decision with the least possible effort (e.g., by picking an acceptable option without considering all possible alternatives) or with the most accuracy (e.g., by carefully evaluating each option before picking one) (Bettman et al. 1998).

In addition, individuals may strive to minimize the experience of negative emotion by avoiding painful tradeoffs, to maximize the ease of justifying a decision, to have fun or enjoy the decision making process, or to find reasons to select or reject one option in the choice set (Bettman et al. 1998; Carlson et al. 2014; Cziksentmihalyi and Nakamura 1999; Luce et al. 2001).

The goals of maximizing decision accuracy and minimizing decision effort are the most studied process goals in the decision research literature, as exemplified by the effort-accuracy framework (Beach and Mitchell 1978; Bettman et al. 1998; Payne et al. 1993). According to the effort-accuracy framework, different decisions strategies (e.g., weighted adding, lexicographic, elimination-by-aspects) can be characterized by the accuracy and effort required to execute the strategy (Payne 1982). Decision makers adaptively select different choice strategies based on their desire to make an accurate or effortless decision (Bettman et al. 1998). Our interest lies not in which decision strategies consumers select, but whether the decision process goal that guides the selection of these strategies can be inhibited, facilitated, or maintained as a consequence of the consumers' benefit goals.

Potential means to an accuracy goal would be processing attributes carefully and making use of all the information available before evaluating or choosing an option. Potential means to a minimize effort goal would be processing only few product attributes and not putting in effort searching for available information before evaluation or choosing an option. In addition, several decision strategies, such as WADD (weighted adding), LEX (lexicographic), SAT (satisficing), EBA (elimination-by-aspects), EQW (equal weight), MCD (majority of confirming dimensions), FRQ (frequency of good and/or bad features) and CCM (componential context model), are also means to pursue maximizing accuracy or minimizing effort goals (Bettman et al. 1998)

2.4 Inhibiting / Facilitating Decision Process Goals

There are two possible ways benefit goals could influence decision process goals. The first possibility is that an increase in the activation of a benefit goal could reduce the activation of a decision process goal. A critical feature of the goal-based model (van Osselaer and Janiszewski 2012) is that goal activation is relative. According to this model, individuals pursue multiple goals concurrently and each of these goals use a share of the individual goal activation resources. Thus, if the activation of a specific goal is increased (decreased), the goal will take a larger (smaller) share of the activation resource available for all goals. Consequently, this specific goal will have increased (decreased) accessibility and a higher (lower) weight relative to other goals in the evaluation and selection of means. This property is realistic and desirable because it represents the fact that goal activation resources are limited and trade-offs are should be made between goals.

There is abundant evidence for the relative nature of goal activation (Brendl, Markman, and Messner 2003; Laran and Janiszewski 2009; Shah, Friedman, and Kruglanski 2002; Shah and Kruglanski 2002). Brendl et al. (2003) showed that people with an increased eating goal have decreased their evaluations of nonfood items in comparison to people without an eating goal. Laran and Janiszewski (2009) showed that the activation of a health goal is reduced when a pleasure goal's activation is increased. Shah and colleagues showed that priming a task goal, in addition to a focal goal, reduces the accessibility of the focal goal (Shah et al. 2002; Shah and Kruglanski 2002). Although this is possible, we reject this possibility because it violates the assumption that benefit goals determine the input into a decision process, hence, their activation should be independent of the activation of decision process goals (van Osselaer et al. 2005).

The second possibility is that benefit goals influence the efficacy of the means used to pursue decision process goals. For example, the means that aid decision making in a stimulus-based search activity include evaluating alternatives and comparing new alternatives to existing favorites. If the set of benefit goals that is being pursued can influence the execution of these decision process means, especially if this happens during the course of considering multiple alternatives, then the decision process may become easier or more difficult as search continues (i.e., means efficacy will change). In turn, this will influence decision process goal pursuit and, by extension, the amount of search.

2.5 Hypotheses Development

We hypothesize that the relationship between active benefit goals influences the difficulty of executing decision process activities. To illustrate, consider the activities that aid decision making in a stimulus-based search activity (e.g., valuing attributes, evaluating alternatives, and comparing new alternatives to existing favorites). In a sequential search process, these decision making activities are repeated upon encountering each new option. When conflicting benefit goals are active (e.g., purchase a prestigious, thrifty car), the comparison of new alternatives to currently favored alternatives should become more difficult as search proceeds (Gourville and Soman 2005; Kerstholt 1992).

This should occur because there is uncertainty about how to make these comparisons, including whether or not to retain a specific choice strategy, how to establish guidelines within a specific choice strategy, and how to determine if a specific choice strategy has led to an acceptable outcome (Broniarczyk and Griffin 2014). This results in decision ambiguity, a feeling of uncertainty with respect to how to make the choice (Kardes et al. 2007; Muthukrishnan 1995; Shiu et al. 2011). In turn, this limits a person's ability to execute the decision process goal.

If the decision process goal is to maximize accuracy, there should be less motivation to consider additional alternatives because the decision process activities used to make these comparisons are becoming harder to use. Put another way, even though a person's goal is to maximize accuracy, the difficulty of the search process reduces confidence that more search will help identify a better alternative. Likewise, if the decision process goal is to minimize effort, there should be less motivation to be efficient because the decision process activities are becoming harder to use. Put another way, even though a person's goal is to minimize effort, the difficulty of the search process reduces confidence an acceptable option has been found and, consequently, increases search.

H1: When the decision process goal is to maximize accuracy, conflicting benefit goals will decrease search relative to a no goal control group.

a) The influence of conflicting benefit goals on maximizing accuracy is serially mediated by decision difficulty and decision ambiguity.

H2: When the decision process goal is to minimize effort, conflicting benefit goals will increase search relative to a no goal control group.

- b) The influence of conflicting benefit goals on minimizing effort is serially mediated by decision difficulty and decision ambiguity.

When complementary benefit goals are active (e.g., purchase a prestigious, fun car), the comparison of new alternatives to currently favored alternatives becomes easier. It becomes easier to decide whether to retain a specific choice strategy, to establish guidelines within a specific choice strategy, and to determine if a specific choice strategy is helping one progress toward an acceptable outcome (Novemsky et al. 2007; Saad and Russo 1996). This results in decision clarity, a feeling of certainty with respect to how to make the choice (Moorthy et al. 1997; Saad and Russo 1996). In turn, this encourages the pursuit of the decision process goal.

Likewise, if the decision process goal is to minimize effort, it is also easier to be efficient (i.e., consider fewer alternatives) because the decision process means become more efficacious as search proceeds. Yet it may be difficult to improve on the efficiency of a decision process that emphasizes efficiency (i.e., a floor effect). Hence, we make no prediction about the minimize effort decision process goal.

H3: When the decision process goal is to maximize accuracy, complementary benefit goals will increase search relative to a no goal control group.

- c) The influence of complementary benefit goals on maximizing accuracy is mediated by decision ease.

2.6 Summary

Four experiments will examine the idea that decision process goal execution is contingent on the relationship between active benefit goals (i.e., conflicting or complementary). Experiment 1 examines whether conflicting benefit goals interfere with decision process goal execution by activating (vs. not) conflicting goals (e.g., thrift and prestige) and assessing whether consumers consider more (or less) options before making a decision. Experiment 2 provides initial evidence that complementary goals can facilitate the pursuit of a maximize accuracy goal, but not the pursuit of a minimize effort goal. Experiments 3a and 3b test our claim that decision difficulty and decision ambiguity reduce the efficaciousness of the decision process means when there are conflicting benefit goals. Experiment 4 tests our claim that decision ease increases the efficaciousness of the decision process means when there are complementary benefit goals.

3 EXPERIMENT 1 – CONFLICTING BENEFIT GOALS INHIBIT THE EXECUTION OF ACCURACY AND EFFORT DECISION PROCESS GOALS

Experiment 1 tests the idea that conflicting benefit goals can inhibit the pursuit of decision process goals (hypothesis 1 and 2). The procedure involved choosing a vacation package (replicate 1) or an automobile (replicate 2). More specifically, consumers initially saw two options along with an opportunity to view an additional option. If consumers decided to look at another option (instead of selecting one of the former two options), a third option would appear. This would occur recursively until consumers either (i) selected one of the options or (ii) looked at all 15 options available.

Experimental manipulations were administered prior to making the choice. First, participants were asked to form a maximize accuracy or minimize effort decision process goal. Then, participants formed two replicate-relevant conflicting benefit goals (treatment condition) or engaged in a distractor task (control condition). The dependent variable was the number of alternatives considered. In the control condition, we expected that consumers who formed accuracy goals would consider more options than consumers who formed low effort goals (Payne et al. 1993). This was a manipulation check of our process goal manipulation. In the conflicting benefit goal treatment condition, we expected consumers who formed maximize accuracy goals to search less than their control condition counterparts (hypothesis 1) and consumers who formed minimize effort goals to search more than their control condition counterparts (hypothesis 2).

3.1 Method

3.1.1 Participants and Design

Participants were 122 U.S. members of Amazon Mechanical Turk (MTurk) who participated the survey for a payment of \$1.20. The design was a 2 (decision process goal: maximize accuracy vs. minimize effort) x 2 (benefit goal: no goals vs. conflicting goals) x 2 (product replicate: cars, vacation packages) mixed design. The decision process goal and benefit goal were manipulated between subjects, whereas product replicate was manipulated within subjects.

3.1.2 Procedure and Stimuli

Participants were told that they would take part in three studies about how consumers make choices. Next, to familiarize participants with the choice procedure, they engaged in a practice

choice task (Appendix A). After the tutorial, participants proceeded to the purported first study, which was designed to manipulate the decision process goal (Appendix B). Next, participants read instructions for the purported second study, which was designed to manipulate the benefit goals (Appendix C). Participants in the conflicting goals condition formed both prestige and thrift goals, which were chosen based on a pretest (see below). We counterbalanced the order of benefit goal formation across participants. Participants in the no goal control condition were asked to do an unrelated intervening task designed to take a similar amount of time and effort: “This study aims to investigate people's cognitive ability. In the box below, list as many words as possible with the letter ‘e’ in the middle. For example, ‘apartment’ or ‘water.’” Next, participants were directed to the purported third study involving the choice tasks for vacation packages and cars. Instructions for the vacation packages (cars) were the following:

“In this study, we are interested in how people make choices of vacation packages (cars). We want you to imagine yourself investigating different vacation packages (cars). There are 15 different vacation packages (cars). Every package (car) is unique and very different from the others. Take a moment to remember the instructions you received earlier in this survey. You have to follow these instructions. You can choose to see as many vacation packages (cars) as you want before deciding, but you do not have to look at all of them if you don't want to. When you are ready, click the arrow button to continue.”

Then, participants saw two options and a third box providing an opportunity to see another option. Each time the participant clicked the “Look at another option” button, a new option would appear, along with the previously displayed options. The dependent variable was number of options considered. There were 15 options available, so the number of options considered could range from two to 15. The options any one person saw were a random draw from the 15 options. The vacation package and cars options varied in terms of prestige and price (Appendix D, Tables 1 and 2). After each of the two choice tasks, participants indicated how focused they were on being as accurate as possible, as well as how focused they were on putting in as little effort as possible using a 9-point scale (1 = not at all focused, 9 = very focused), which was our manipulation check. We counterbalanced the presentation order of product replicates (cars vs. vacation packages).

3.1.3 Pretest

Two pretests were used to select the conflicting goals. In the first pretest ($n = 19$ MTurk participants), we asked: “Below are pairs of benefits people could look for when searching for a new car. We want to know how easy you think it would be to find both benefits in a new car.” The pairs of benefits were: economical and prestigious, economical and fun, economical and relaxing, economical and safe, prestigious and fun, prestigious and relaxing, and prestigious and safe. Participants answered on a 7-point scale (1 = Few cars have both benefits; 7 = Many cars have both benefits). In the second pretest ($n = 17$), we used the same procedures, but instead of cars, we used the term “vacation packages.” In both samples, the “economical and prestigious” benefits were perceived to be the most conflicting (i.e., with the lowest mean score; $M = 2.88$ in the cars sample and $M = 2.84$ in the vacation packages sample). Importantly, with respect to subsequent studies, “prestigious and fun” were perceived to be the most complementary (i.e., with the highest mean score; $M = 5.94$ in the cars sample and $M = 5.74$ in the vacation packages sample). Importantly, paired sample tests of these measures indicate statistically significant differences ($p < 5\%$).

3.2 Results

3.2.1 Manipulation Check

We averaged the focus on maximizing accuracy ($\alpha = .84$) and minimizing effort ($\alpha = .76$) scores across replicates. As expected, participants in the maximize accuracy condition were more focused on being accurate than participants in the minimize effort condition ($M_{\text{accuracy}} = 8.01$, $M_{\text{effort}} = 6.73$; $F(1, 118) = 19.63$, $p < .001$). There was no decision process goal by benefit goal interaction ($F(1, 118) = .01$, $p > .10$). As expected, participants in the minimize effort condition were more focused on limiting effort than participants in the maximize accuracy condition ($M_{\text{accuracy}} = 3.35$, $M_{\text{effort}} = 5.61$; $F(1, 118) = 28.40$, $p < .001$). There was no decision process goal by benefit goal interaction ($F(1, 118) = .57$, $p > .10$).

3.2.2 Replicates

We coded each “Look at another option” selection as one and then summed these selections with two, since the baseline (i.e., starting point) was the consideration of two options. Thus, the DV had a range from 2 (lowest possible score) to 15 (highest possible score). Then, we assessed if there

were interactions between the product replicate and the decision process goal or benefit goal on the number of options considered. There was no three-way interaction between product replicate, process goal, and benefit goal ($F(1, 118) = .03, p = .85$). Moreover, there was no two-way interaction between product replicate and the benefit goal ($F(1, 118) = .004, p = .95$). We did find, however, a significant two-way interaction between product replicate and the process goal ($F(1, 118) = 6.28, p < .05$)¹. Since this interaction did not influence the critical tests, we collapsed across replicates for the final analysis. There were no replicate position by treatment factor interactions in this or subsequent studies.

3.2.3 Number of Options Considered

An ANOVA revealed a significant process goal by benefit goal interaction ($F(1, 118) = 16.31, p < .001$; see fig. 1). First, consistent with previous research, control participants in the maximize accuracy goal condition considered more options than control participants in the minimize effort goal condition ($M_{\text{accuracy}} = 10.03$ vs. $M_{\text{effort}} = 4.01$; $F(1, 118) = 43.03, p < .001$). Next, to test hypotheses 1 and 2, we assessed if the consideration of conflicting benefit goals interfered with the pursuit of the process goals. In the maximize accuracy goal condition, considering the conflicting benefit goals significantly reduced the number of options considered relative to the control group ($M_{\text{no goal}} = 10.03, M_{\text{conflicting goals}} = 7.60$; $F(1, 118) = 6.78, p < .05$). In the minimize effort goal condition, considering the conflicting benefit goals significantly increased the number of options considered relative to the control group ($M_{\text{no goal}} = 4.01, M_{\text{conflicting goals}} = 6.87$; $F(1, 118) = 9.69, p < .01$). As expected, there was no difference between the accuracy process goal and minimize process goal conditions in the conflicting goals condition ($p > 50\%$).

¹In order to further explore this interaction effect, we compared the numbers of options considered both for vacation packages and cars for each process goal condition. We found that the number of cars considered was significantly higher than the number of vacation packages considered both in accuracy ($M_{\text{cars}} = 10.2$ vs. $M_{\text{vacation}} = 7.4$; $F(1, 118) = 34.88, p = .001$) and low effort conditions ($M_{\text{cars}} = 6.0$ vs. $M_{\text{vacation}} = 4.8$; $F(1, 118) = 5.90, p = .017$). Though the number of cars considered is higher than the number of vacations considered, the pattern of results is the same both for cars, vacation packages, and both measures into a composite score.

Figure 3.1 – Results from Experiment 1

3.3 Discussion

The results of experiment 1 provide evidence that the execution of process goals is undermined in the presence of two conflicting benefit goals. When people did not have active benefit goals, they were able to pursue both the maximize accuracy and minimize effort decision process goals. When people had two conflicting benefit goals active, there was an interference effect: people with maximize accuracy goals considered fewer options and people with minimize effort goals considered more options.

The results of study 1 are inconsistent with three alternative explanations. First, it could be argued that the benefit goals made the decision process goals less accessible. If this were the case, then the manipulation check on the decision process goal should have shown a decision process goal by benefit goal interaction. This was not the case – the decision process goals were equally active when the conflicting benefit goals were present versus absent.

Second, it could be that the introduction of conflicting benefit goals made search more difficult in a general sense (i.e., it is hard to pursue conflicting benefit goals), as opposed to reducing the

efficacy of decision process means (i.e., it is hard to execute decision processes when there are conflicting benefit goals). If the conflicting goals make search generally difficult, there should have been a main effect of the goal manipulation (i.e., decreased search in both decision process goal conditions). Instead, we observed increased search in the minimize effort condition, a finding that is more consistent with the idea that the conflicting benefit goals made it difficult to execute the decision process means.

Finally, it could be argued that negatively correlated benefit goals are equivalent to negatively correlated attributes (NCA), hence the study 1 results are a reflection of the NCA literature (Bettman et al. 1993; Hansen and Helgeson 2001; Huber and Klein 1991; Johnson, Meyer, and Ghose 1989; Although this is possible, findings in the NCA literature are in direct conflict with the results of study 1. Bettman et al. (1993) show that NCA encourages more decision effort owing to a desire to reach an acceptable resolution, suggesting that goal conflict should lead to more search in the maximize accuracy condition. Johnson et al. (1989) show that NCA encourages less decision effort owing to a desire to disengage from the choice, suggesting that goal conflict should lead to less search in the minimize effort condition. Thus, the NCA literature predicts a pattern of results that is opposite that observed in study 1.

We did not investigate participants' individual answers as a content analysis is outside the scope of this research. Also, we did not investigate whether the intervening task (no goal condition – writing words with the letter e in the middle) influenced the participants responses. However, several research articles from *Journal of Consumer Research* (e.g., Bayuk, Leboeuf, and Janizewski 2010) and psychology journals use the very same paradigm for the control conditions.

4 EXPERIMENT 2 – COMPLEMENTARY BENEFIT GOALS FACILITATE THE EXECUTION OF THE ACCURACY DECISION PROCESS GOAL

In experiment 2, we wanted to provide initial evidence that complementary benefit goals facilitate the pursuit of a maximize accuracy, but not a minimize effort, decision process goal. In experiment 2, we first activated a maximize accuracy or a minimize effort decision process goal. Then, consumers formed two complementary benefit goals (vs. no goals) before making a choice. As in experiment 1, our dependent variable was the number of options considered. We predicted that individuals in the complementary benefit goals condition would look for more options than individuals in the no goal condition when they had an accuracy goal (hypothesis 3). Conversely, we did not expect differences between the complementary benefit goal and no goal conditions, when participants had a minimize effort goal, because it would be difficult to further increase efficiency (i.e., a floor effect).

4.1 Method

4.1.1 Participants and Design

Participants were 142 U.S. members of Amazon Mechanical Turk (MTurk) who participated the survey in exchange of \$1.20. The design was a 2 (decision process goal: maximize accuracy vs. minimize effort) x 2 (benefit goal: no goals vs. complementary goals) x 2 (product replicate: cars, vacation packages) mixed design. The decision process goal and benefit goal were manipulated between subjects, whereas product replicate was manipulated within subjects.

4.1.2 Procedure and Stimuli

The procedure was the same as study 1, with the exception that, instead of activating conflicting benefit goals, we encouraged participants to activate two complementary benefit goals. Based on study 1's pretest, we selected prestige and have fun as the complementary benefit goals. First, participant completed the choice tutorial task (Appendix A). Then, participants activated decision process goals (Appendix B). Next, participants either participated in a filler task, in the no benefit goal condition, or activated both prestige and have fun goals, in complementary benefit goals condition (Appendix C). As in experiment 1, we counterbalanced the order of benefit goal formation across participants. After forming benefit goals (or doing the intervening filler task),

participants completed the choice tasks and responded to manipulation check questions on decision process goals.

4.2 Results

4.2.1 Manipulation Check

We averaged the focus on maximizing accuracy ($\alpha = .85$) and minimizing effort ($\alpha = .83$) scores across replicates. As expected, participants in the maximize accuracy condition were more focused on being accurate than participants in the minimize effort condition ($M_{\text{accuracy}} = 8.08$ vs. $M_{\text{effort}} = 6.18$; $F(1, 138) = 31.71, p < .001$). There was no decision process goal by benefit goal interaction ($F(1, 138) = .45, p > .10$). As expected, participants in the minimize effort condition were more focused on limiting effort than participants in the maximize accuracy condition ($M_{\text{effort}} = 6.14$; $M_{\text{accuracy}} = 2.86$; $F(1, 138) = 63.28, p < .001$). There was no decision process goal by benefit goal interaction ($F(1, 138) = .44, p > .10$).

4.2.2 Replicates

We began by assessing if there was an effect of the product replicate on the between-subject factors. There was no three-way interaction between product replicate, process goal and benefit goal ($F(1, 138) = .31, p = .57$), nor were there any second-order interactions between the benefit goal and product replicates ($F(1, 138) = .23, p = .62$) or the process goal and product replicates ($F(1, 138) = 1.06, p = .30$). Thus, we collapsed across replicates for the final analysis.

4.2.3 Number of Options Considered

An ANOVA revealed a significant decision process goal by benefit goal interaction ($F(1, 138) = 7.90, p < .01$). First, consistent with previous research, control participants in the maximize accuracy goal condition considered more options than control participants in the minimize effort goal condition ($M_{\text{accuracy}} = 7.50$ vs. $M_{\text{effort}} = 4.61$; $F(1, 138) = 10.04, p < .01$, see fig. 2). Next, a test of hypothesis 3 found maximize accuracy condition participants considered more options in the complementary process goal condition than the no goal condition ($M_{\text{no goal}} = 7.50, M_{\text{complementary goals}} = 10.44$; $F(1, 138) = 8.16, p < .01$). There was no influence of the complementary goals in the minimize effort condition ($M_{\text{no goal}} = 4.61, M_{\text{complementary goals}} = 3.69$; $F(1, 138) = 1.01, p = .316$).

Figure 4.1 – Results from Experiment 2

4.3 Discussion

The results of experiment 2 provide evidence that benefit goals can facilitate the pursuit of a decision process goal. When people with a maximize accuracy goal had two complementary benefit goals, they considered significantly more options than people who had no active goals. Notably, these results help provide additional evidence that benefit goals influence the execution of decision process means, as opposed to interfering with the activation of the decision process goal itself. If the benefit goals were interfering with the activation of the decision process goals, then the number of alternatives considered in the maximize accuracy condition should have decreased, not increased, when the complementary benefit goals were active.

5 EXPERIMENTS 3A AND 3B – CONFLICTING GOALS SERIAL MEDIATION ANALYSIS

Experiment 1 demonstrated conflicting benefit goals could interfere with the pursuit of maximize accuracy and minimize effort decision process goals. We argued that these effects were a consequence of decision difficulty leading to ambiguity about how to execute the decision process goals (hypotheses 1a and 2a). When the means used to pursue decision process goal are difficult to use, the means become less efficacious and the approach to pursuing the decision process goal becomes ambiguous. The primary purpose of experiments 3a and 3b was to provide evidence for this mediating process.

Experiments 3a and 3b were also designed with two other purposes in mind. First, experiment 1 used a control group in which no explicit benefit goal was provided. These control groups were selected because they represented a natural decision environment. Yet, from an internal validity perspective, a more appropriate control group might engage in the pursuit of one of the two conflicting benefit goals. This would allow us to confirm that there was nothing peculiar about one of the two conflicting benefit goals that discouraged pursuit of the decision process goal. In addition, these studies measured four alternative explanations for the effect: process accountability, outcome accountability, decision importance, and involvement with the choice task, as each of these processes has been shown to influence pursuit of a decision process goal (Bettman et al. 1998; McAllister, Mitchell, and Beach 1979; Tyszka 1998; Zhang and Mittal 2005).

5.1 Design and Method

The design and method for experiment 3a and 3b were identical except for the decision process goal. Thus, we discuss the procedures concurrently.

5.1.1 Participants and Design

Amazon Mechanical Turk (MTurk) workers were paid \$1.20 to participate in experiment 3a (n = 196) and 3b (n = 204). The design was a 4 (benefit goal: no goals vs. one goal [prestige] vs. one goal [thrift] vs. conflicting goals) x 2 (product replicate: cars, vacation packages) mixed design. The benefit goal was a between-subject factor and the product replicate was a within-subject factor. Participants in experiment 3a received a maximize accuracy goal and participants in experiment 3b received a minimize effort goal.

5.1.2 Procedure

The procedure was similar to the previous studies. First, participants completed the choice task tutorial (Appendix A). Next, all participants read the decision process goal activation instructions (Appendix B). Then, participants were randomly assigned to the benefit goal condition. Participants in the no goal condition did a filler task. Participants in the one goal condition activated a single benefit goal (prestige or thrift). Participants in the two goal condition activated both benefit goals (prestige and thrift, counterbalanced) (Appendix C).

After each choice task, we measured mediators. Decision difficulty was measured using a four-item, nine-point semantic differential scale: “very easy/very difficult,” “not problematic at all/very problematic,” “very simple/very complex,” “not complicated at all/very complicated” ($\alpha_{3a} = .92$; $\alpha_{3b} = .92$) (Laroche et al. 2005). Decision ambiguity ($\alpha_{3a} = .84$; $\alpha_{3b} = .83$) was measured using three nine-point Likert items: “I would describe myself as indecisive during the car (vacation package) choice,” “I was struggling with the decision about the cars (vacation packages),” “I felt uncertain about what to choose” [1 = Strongly Disagree, 9 = Strongly Agree] (Kardes et al. 2007). Process accountability ($\alpha_{3a} = .76$; $\alpha_{3b} = .86$) and outcome accountability ($\alpha_{3a} = .81$; $\alpha_{3b} = .85$) were measured using four nine-point Likert items: “When making this decision, I concentrated on the process (outcome) of choosing,” “I believed that I would have to explain the process (outcome) of choosing to the researcher,” “I worried mostly about using (getting) the correct decision process (outcome), not about the final outcome (decision process),” “I was concerned mostly about using (getting) the correct decision process (outcome),” [1 = Strongly Disagree, 9 = Strongly Agree] (Zhang and Mittal 2005). Decision importance was measured using a single semantic differential (1 = not important at all, 9 = very important). Involvement in the choice task ($\alpha_{3a} = .92$; $\alpha_{3b} = .94$) was measured using three semantic differential items (1 = not involved at all, 9 = very involved; 1 = not interested at all, 9 = very interested; 1 = not engaged at all, 9 = very engaged) (Wilcox, Kramer, and Sen 2011).

5.1.3 Experiment 3a Results (Maximize Accuracy Goal)

5.1.3.1 Replicates

There was no product replicate by benefit goal interaction on the number of alternatives considered ($F(3, 192) = .75$, $p = .52$), so the number of alternatives considered was averaged across replicates. There was no product replicate by benefit goal interaction on the potential mediators: decision

difficulty, decision ambiguity, process accountability, outcome accountability, importance, and involvement (all F 's < 1.3 , NS), so these measures were averaged across replicates.

5.1.3.2 Number of Options Considered

There was a significant influence of the benefit goal condition on the number of options considered ($F(3, 192) = 6.88$, $p < .05$). Three sets of planned contrasts were used to understand the nature of the effects. First, participants in the conflicting goals condition ($M = 6.33$) considered significantly less options than participants in the one goal conditions ($M_{\text{prestige}} = 9.31$, $M_{\text{thrift}} = 9.65$; $F(1, 192) = 16.22$, $p < .001$). Second, participants in the conflicting goals condition ($M = 6.33$) considered significantly less options than participants in the no goal condition ($M = 9.91$; $F(1, 192) = 15.75$, $p < .001$). Third, there were no differences between the no goal and one goal conditions ($F(1, 192) = .29$, $p = .58$). We did not expect differences between these conditions, as our interest laid on investigating whether conflicting goals (vs. other conditions) influenced the number of options considered.

5.1.3.3 Mediation Analysis

The benefit goal manipulation significantly influenced decision difficulty ($F(3, 192) = 24.84$, $p < .001$). People in the conflicting goals condition ($M = 5.58$) perceived the decision to be more difficult than participants in the one goal condition ($M_{\text{prestige}} = 2.92$, $M_{\text{thrift}} = 3.31$; $F(1, 192) = 64.85$, $p < .001$) or no goal condition ($M = 3.13$; $F(1, 192) = 48.09$, $p < .001$), but these latter three conditions did not differ from each other ($F(1, 192) = .002$, $p = .96$). The benefit goal manipulation significantly influenced decision ambiguity ($F(3, 192) = 36.51$, $p < .001$). People in the conflicting goals condition ($M = 5.76$) perceived the decision as more ambiguous than participants in the one goal condition ($M_{\text{prestige}} = 2.98$, $M_{\text{thrift}} = 3.23$; $F(1, 192) = 91.92$, $p < .001$) or no goal condition ($M = 2.94$; $F(1, 192) = 77.38$, $p < .001$), but these latter three conditions did not differ from each other ($F(1, 192) = .30$, $p = .51$).

The serial mediation analysis was conducted using PROCESS model 6 (Hayes 2013) and an orthogonal contrast coding (Hayes and Preacher 2014; Rosenthal and Rosnow 1985) in which the conflicting goals condition was contrasted with the other benefit goal conditions. A preliminary analysis showed that decision difficulty (95% CI: $-.64$ to $-.17$, 5000 bootstraps) and decision ambiguity (95% CI: -1.02 to $-.42$, 5000 bootstraps) mediated the effect of conflicting goals on the number of options considered. As hypothesized in hypothesis 1a, there was a decision difficulty

→ decision ambiguity serial mediation (95% CI: -.66 to -.18, 5000 bootstraps; see fig. 3). There was no decision ambiguity → decision difficulty serial mediation (95% CI: -.24 to .21, 5000 bootstraps).

Note.—Path coefficients are unstandardized betas. Values in parentheses indicate the effect of conflicting goals on the dependent variable after controlling for the mediators. * $p < .05$ ** $p < .01$ *** $p < .001$

Figure 5.1 - Mediation Model for Experiment 3a

5.1.3.4 Alternative Explanations

We performed analyses in order to rule out alternative explanations. As expected, the effect of conflicting goals on the number of options considered was not mediated by process accountability (95% CI: -.10 to .03), outcome accountability (95% CI: -.05 to .01), perceived decision importance (95% CI: -.01 to .13), or involvement in the choice task (95% CI: -.15 to .01).

5.1.4 Experiment 3b Results (Minimize Effort Goal)

5.1.4.1 Replicates

There was no product replicate by benefit goal interaction on the number of alternatives considered ($F(3, 200) = .38, p = .77$), so the number of alternatives considered was averaged across replicates. There was no product replicate by benefit goal interaction on the potential mediators: decision difficulty, decision ambiguity, process accountability, outcome accountability, importance, and involvement (all F 's < 1.6 , NS), so these measures were averaged across replicates.

5.1.4.2 Number of Options Considered

The benefit goal manipulation significantly influenced the number of options considered ($F(3, 200) = 4.01, p < .05$). People in the conflicting goals condition ($M = 5.64$) considered more options than participants in the one goal condition ($M_{\text{prestige}} = 4.02, M_{\text{thrift}} = 3.78$; $F(1, 200) = 11.63, p < .001$) or no goal condition ($M = 4.24$; $F(1, 200) = 5.97, p < .05$), but these latter three conditions did not differ from each other ($F(1, 200) = .49, p = .48$).

5.1.4.3 Mediation Analysis

The benefit goal manipulation significantly influenced decision difficulty ($F(3, 200) = 4.77, p < .001$). People in the conflicting goals condition ($M = 4.77$) perceived the decision to be more difficult than participants in the one goal condition ($M_{\text{prestige}} = 3.17, M_{\text{thrift}} = 3.02$; $F(1, 200) = 29.66, p < .001$) or no goal condition ($M = 3.28$; $F(1, 200) = 18.70, p < .001$), but these latter three conditions did not differ from each other ($F(1, 200) = .40, p = .53$). The benefit goal manipulation significantly influenced decision ambiguity ($F(3, 200) = 13.87, p < .001$). People in the conflicting goals condition ($M = 5.26$) perceived the decision as more ambiguous than participants in the one goal condition ($M_{\text{prestige}} = 3.29, M_{\text{thrift}} = 3.47$; $F(1, 200) = 39.02, p < .001$) or no goal condition ($M = 3.58$; $F(1, 200) = 24.70, p < .001$), but these latter three conditions did not differ from each other ($F(1, 200) = .51, p = .47$).

The serial mediation analysis was conducted using PROCESS model 6 (Hayes 2013) and an orthogonal contrast coding (Hayes and Preacher 2014; Rosenthal and Rosnow 1985) in which the conflicting goals condition was contrasted with the other benefit goal conditions. A preliminary analysis showed that decision difficulty (95% CI: .03 to .25, 5000 bootstraps) and decision ambiguity (95% CI: .09 to .34, 5000 bootstraps) mediated the effect of conflicting goals on the number of options considered. As hypothesized in hypothesis 2a, there was a decision difficulty → decision ambiguity serial mediation (95% CI: .05 to .24, 5000 bootstraps; see fig. 4). There was no decision ambiguity → decision difficulty serial mediation (95% CI: -.09 to .09, 5000 bootstraps).

Note.—Path coefficients are unstandardized betas. Values in parentheses indicate the effect of conflicting goals on the dependent variable after controlling for the mediators. * $p < .05$ ** $p < .01$ *** $p < .001$

Figure 5.2 - Mediation Model for Experiment 3b

5.1.4.4 Alternative Explanations

The effect of conflicting goals on the number of options considered was not mediated by process accountability (95% CI: -.04 to .01), outcome accountability (95% CI: -.05 to .01), or involvement in the choice task (95% CI: -.004 to .07).

Unexpectedly, we found a mediating effect of decision importance (95% CI: .01 to .11). To further investigate this issue, we performed a comparison between the decision importance and the decision difficulty → decision ambiguity specific indirect effects using 5000 bootstrap samples (Hayes 2013). A 95% confidence interval of the difference between these specific indirect effects did not contain zero [.01 to .21], indicating that the specific indirect effect of decision difficulty → decision ambiguity ($ab = .12$) is significantly stronger than the specific indirect effect of decision importance ($ab = .03$). Moreover, the direct effect of conflicting goals on the number of options considered became nonsignificant when decision difficulty → decision ambiguity were the mediating variables (95% CI: -.04 to .46), whereas this was not the case when decision importance was used as the mediator (95% CI: .13 to .60). Thus, the effect of process goal conflict on the minimize effort decision process goal may be multiply-mediated, but decision difficulty → decision ambiguity is a stronger mediating process.

5.1.5 Discussion

Experiment 3 found that conflicting benefit goals decrease the pursuit of a maximize accuracy (experiment 3a) or a minimize effort (experiment 3b) decision process goal because they make the

search process more difficult and ambiguous. It is important to note that this effect was not observed when there was a single benefit goal, suggesting that it was not the case that one of the benefit goals was difficult to pursue. It was also the case that the people engaged in more search when conflicting benefit goals were pursued in a minimize effort condition. This is further evidence that benefit goals can influence the execution of the means used to pursue the decision process goal. If difficult combinations of benefit goals simply made search harder, the amount of search should have declined, not increased, in the minimize effort condition.

6 EXPERIMENT 4 – COMPLEMENTARY GOALS MEDIATION ANALYSIS

Experiment 2 demonstrated complementary benefit goals could encourage the pursuit of maximize accuracy decision process goal (i.e., people searched more than in the no goal control group). We argued that these effects were a consequence of the ease of executing the means used to pursue the decision process goal (hypotheses 3a). To the extent the means used to pursue a decision process goal are easy to execute, the means become more efficacious and are more likely to be used. The primary purpose of experiment 4 was to provide evidence for this mediating process.

Experiment 4 was also designed with two other purposes in mind. First, experiment 2 used a control group in which no explicit goal was provided. In addition to the internal validity concerns discussed prior to experiment 3, the no benefit goal control group raises a conceptual issue. It could be that any easy to pursue benefit goal makes decision process means more efficacious (i.e., goal complementarity is unnecessary). If this is true, then goal pursuit involving a single benefit goal should be as efficacious as goal pursuit involving two complementary benefit goals and the number of alternative considered in these situations should be equivalent. If, on the other hand, we are correct in our contention that complementarity between benefit goals makes it easier to use means associated with the pursuit of a maximize accuracy goal, then there should be more search when there are complementary benefit goals than when there is only one of these benefit goals.

6.1 Design and Method

6.1.1 Participants and Design

Amazon Mechanical Turk (MTurk) workers were paid \$1.20 to participate in the experiment ($n = 242$). The design was a 4 (benefit goal: no goals vs. one goal [prestige] vs. one goal [have fun] vs. complementary goals) $\times$ 2 (product replicate: cars, vacation packages) mixed design. The benefit goal was a between-subject factor and the product replicate was a within-subject factor. All participants received a maximize accuracy goal.

6.1.2 Procedure

The procedure was the same of experiment 3a with one exception: we used the same complementary benefit goals as in experiment 2. For ease of exposition, decision difficulty will be called decision ease ($\alpha = .93$) and decision ambiguity will be called decision clarity ($\alpha = .88$) [these variables were reverse coded]. Process accountability ($\alpha = .81$), outcome accountability ($\alpha = .80$),

decision importance, and involvement ($\alpha = .93$) were measured using the same items from experiment 3.

6.2 Results

6.2.1 Replicates

There was no product replicate by benefit goal interaction on the number of alternatives considered ($F(3, 238) = .35, p = .98$), so the number of alternatives considered was averaged across replicates. There was no product replicate by benefit goal interaction on the potential mediators: decision clarity, process accountability, outcome accountability, involvement, and importance (all F 's < 2.5 , NS), so these measures were averaged across replicates. There was a product replicate by benefit goal interaction for the decision ease measure ($F(3, 238) = 3.03, p = .03$). The interaction reflected a stronger effect for the vacation packages than the cars in the prestige benefit goal condition², but each replicate showed the same pattern of responses (i.e., the decision was easier in the complementary benefit goals condition – see means below). Thus, the decision ease measures were also averaged across replicates.

6.2.2 Number of Options Considered

The benefit goal manipulation significantly influenced the number of options considered ($F(3, 238) = 3.05, p < .05$). People in the complementary goals condition ($M = 9.58$) considered more options than participants in the one goal conditions ($M_{\text{prestige}} = 7.88, M_{\text{fun}} = 7.13$; $F(1, 238) = 8.12, p = .005$) or no goal condition ($M = 7.86$; $F(1, 238) = 4.17, p = .042$), but these latter three conditions did not differ from each other ($F(1, 238) = .23, p = .63$).

6.2.3 Mediation Analysis

The benefit goal manipulation significantly influenced decision ease ($F(3, 238) = 3.76, p < .05$). People in the complementary goals condition ($M_{\text{vacation}} = 6.74, M_{\text{cars}} = 6.94, M_{\text{average}} = 6.84$) perceived the decision to be easier than participants in the one goal conditions ($M_{\text{prestige} - \text{vacation}} =$

²Participants in the prestige benefit goal condition considered the decision to be easier for the cars replicate ($M = 6.6$) than the vacation packages replicate ($M = 5.5$; $F(1, 238) = 14.60, p < .001$). There was no product replicate effect for the no goal, having fun, and complementary goal conditions (all F 's < 1.2 , NS).

5.53, $M_{\text{prestige} - \text{cars}} = 6.58$, $M_{\text{prestige} - \text{average}} = 6.06$, $M_{\text{fun} - \text{vacation}} = 5.80$; $M_{\text{fun} - \text{cars}} = 5.74$, $M_{\text{fun} - \text{average}} = 5.77$; $F(1, 238) = 8.95$, $p < .01$) or no goal condition ($M_{\text{vacation}} = 5.69$, $M_{\text{cars}} = 5.99$, $M_{\text{average}} = 5.84$; $F(1, 238) = 7.78$, $p < .01$), but these latter three conditions did not differ from each other ($F(1, 238) = .05$, $p = .81$).

The benefit goal manipulation significantly influenced decision clarity ($F(3, 238) = 5.53$, $p = .001$). People in the complementary goals condition ($M = 6.78$) perceived the decision as less ambiguous than participants in the one goal conditions ($M_{\text{prestige}} = 5.97$, $M_{\text{fun}} = 5.86$; $F(1, 238) = 7.93$, $p < .01$) or no goal condition ($M = 5.35$; $F(1, 238) = 16.14$, $p < .001$), but these latter three conditions did not differ from each other ($F(1, 238) = 3.37$, $p = .07$).

The serial mediation analysis was conducted using PROCESS model 6 (Hayes 2013) and an orthogonal contrast coding (Hayes and Preacher 2014; Rosenthal and Rosnow 1985) in which the complementary benefit goals condition was contrasted with the other benefit goal conditions. A preliminary analysis showed that decision ease (95% CI: .05 to .26, 5000 bootstraps) and decision clarity (95% CI: .02 to .21, 5000 bootstraps) mediated the effect of conflicting goals on the number of options considered. To further investigate this issue, we performed a comparison between the decision ease and decision clarity specific indirect effects (Hayes 2013). A 95% confidence interval of the difference between these specific indirect effects did not contain zero [.01 to .50], indicating that the specific indirect effect of decision ease ($ab = .16$) is significantly stronger than the specific indirect effect of decision clarity ($ab = -.04$). Thus, the effect may be multiply-mediated, but decision ease appears to be the stronger mediator.

There was no decision ease $\rightarrow$ decision clarity serial mediation (95% CI: -.13 to .05, 5000 bootstraps).

Note.—Path coefficients are unstandardized betas. Values in parentheses indicate the effect of conflicting goals on the dependent variable after controlling for the mediator. * $p < .05$ ** $p < .01$ *** $p < .001$

Figure 6.1 - Mediation Model for Experiment 4

6.2.4 Alternative Explanations

We performed additional analyses in order to rule out alternative explanations. As expected, the number of complementary benefit goals on the number of options considered was not mediated by process accountability (95% CI: $-.03$ to $.05$), outcome accountability (95% CI: $-.01$ to $.07$), perceived decision importance (95% CI: $-.09$ to $.01$), or involvement in the choice task (95% CI: $-.10$ to $.07$).

6.3 Discussion

Experiment 4 found that complementary benefit goals increase the pursuit of an accuracy decision process goal because they make the search process easier. This is further evidence that benefit goals can influence the execution of the decision process means used to pursue the decision process goal. It is important to note that this effect was not observed when there was a single benefit goal, suggesting that the complementary relationship between the benefit goals was responsible for the change in the ease of pursuing the accuracy goal.

Unlike experiments 3a and 3b, experiment 4 did not show a serial mediation of decision ease → decision clarity – only decision ease mediated. Although we anticipated this serial mediation, there are two reasons we may not have observed the effect. First, we did not restate the decision ambiguity scale items to emphasize clarity. Decision clarity (ambiguity) was measured using: “I would describe myself as indecisive during the car (vacation package) choice,” “I was struggling with the decision about the cars (vacation packages),” “I felt uncertain about what to choose.” This focused people on the wrong characteristics of the search. In contrast, decision ease (difficulty)

was measured using scale endpoints that represented ease versus difficulty (e.g., “very easy/very difficult,” “not problematic at all/very problematic,” “very simple/very complex,” “not complicated at all/very complicated”). Thus, the measure is more precise, allowing it to mediate.

A second potential reason for the failed serial mediation is conceptual. It may be that decision processes become easier to execute when there is a convergence of information from multiple sources (Mervis and Rosch 1981). An increase in the amount of correlated information allows for an easier classification of alternatives (e.g., “unacceptable,” “acceptable”) and quicker ordinal comparisons (e.g., “this alternative is $<$ or $>$ than the best-so-far”) (Rosch and Mervis 1975). The influence of convergent information on the ease of executing choice processes may not depend on making the decision problem less ambiguous.

7 GENERAL DISCUSSION

The results demonstrate that the relationships between benefit goals can influence a person's ability to execute a decision process goal. Conflicting benefit goals can inhibit a person's ability to pursue a maximize accuracy goal or a minimize effort decision process goal (experiment 1). This interference effect occurs because conflicting benefit goals lead to decision difficulty and ambiguity which, in turn, reduce the efficaciousness of the decision process means (experiment 3). Complementary benefit goals can facilitate a person's ability to pursue a maximize accuracy goal (experiment 2). This facilitation effect occurs because complementary benefit goals lead to decision ease which, in turn, increases the efficaciousness of the decision process means (experiment 4).

7.1 Theoretical Implications

Theoretically, this research advances our understanding of how different classes of goals interact and influence consumer choice. A common assumption in goal theory is that benefit and decision process goals independently contribute to goal pursuit (Bettman et al. 1998; van Osselaer et al. 2005). That is, while benefit goals determine outcome priorities (regardless of the decision strategy), decision process goals determine the choice strategy (regardless of the outcome priorities). This research has demonstrated that this is not always the case. To the best of our knowledge, our research is the first to demonstrate that certain benefit goal characteristics – such as whether multiple benefit goals are conflicting or complementary – might either inhibit or facilitate the execution of activities that support the pursuit of decision process goals.

Furthermore, whereas prior adaptive decision making research has primarily explored how different choice strategies are selected based on maximizing decision accuracy and minimizing decision effort goals (Beach and Mitchell 1978; Bettman et al. 1998; Payne et al. 1993), less is known about whether the decision process goal that guides the selection of these strategies can be directly influenced. Choice characteristics - such as decision importance, irreversibility, feedback timeliness, and personal responsibility - have been shown to influence the relative weight placed on maximizing accuracy or minimizing effort (Bettman et al. 1998; Payne et al. 1993). The present research extends the literature by identifying factors unrelated to choice characteristics - pairs of conflicting or complementary goals - that, as opposed to merely influencing the weight placed on

maximizing accuracy or minimizing effort goals, can completely inhibit or facilitate the execution of a decision process goal.

A potential critique of this research is the lack of actionable market applications. Although we recognize this, we emphasize that this research aims to contribute mainly to the theoretical literature of consumer behavior. Thus, lacking managerial implications is something we acknowledge.

7.2 Limitations

Our research is not without limitations. There are several characteristics of the experiments that limit the generalizability of the findings. First, the same procedure, which involved selecting among cars and vacation packages, was used for every study. Moreover, the same pair of conflicting goals (thrift and prestige), complementary goals (have fun and prestige), and decision process goals (maximize accuracy and minimize effort) were used for every study. Although we believe that the findings are representative of many consumer decision contexts, using alternative goals and dependent measures would certainly provide stronger evidence for the finding that decision process goals can be either inhibited or facilitated depending on the characteristics of active benefit goals. Moreover, using different product categories with varying elasticities could increase the generalizability of the findings.

A second limitation is that information on the alternatives was made available to the subjects in a sequential fashion. Even though we started with the premise that many types of decision making involve the sequential consideration of alternatives, it is also fairly common for consumers to examine all alternatives simultaneously. In such a scenario, different procedures are necessary in order to measure information search. Future research could address if choice format influences the effect observed in our studies.

A third drawback of our studies is that the choice scenarios involved hypothetical purchases (e.g., “We want you to imagine yourself investigating different vacation packages”) where consumers were, at some point, obligated to choose. When a variety of competing goals are activated, such as in busy or enriched environments, they might lead to decision paralysis or choice deferral (van Osselaer and Janiszewski 2012). Future research would benefit from using a natural environment, allowing a no-choice option, or both.

A fourth limitation is that all the studies were restricted to situations in which the available alternatives were stimulus-based. However, available alternatives can be stimulus-based, memory-based, or a mix of stimulus-based and memory-based (Lynch and Srull 1982).

A fifth limitation is that the subjective interpretation on what “having fun”, “prestige”, and “thrill” is completely depends on each person’s idiosyncratic construal of the situation. Potential factors that could influence the subjective interpretation of the goals used in the study is: socio-economic status, having (vs. not) traveled in the previous years, having (vs. not) a car, and so on.

A sixth limitation is that in this research we use a conscious goals framework. We leave it to future research to investigate whether the pattern of results is the same for unconscious goals.

One could argue that the conflicting goals manipulations are staged or do not exist. Although we acknowledge that conflicting goals are not “pursued consciously”, we assert that conflicting benefit goals are the norm in consumer decision making. At the very least, consumers must almost always make a price-quality tradeoff. Thus, we argue that the presence of such goal conflict represents the baseline condition. However, as for the manipulations, we invite future research to test different manipulations of goal conflict and investigate if there are any differences on the observed results. Importantly, with respect to the goals, future research could investigate whether activating benefit goals before the decision process goals (which is the reverse of what was done in this research) changes the results in any way. We do not believe that will happen but leave this possibility.

7.3 Future Research

A considerable amount of decision process research has investigated the influence of choice set characteristics on the strategies used to make a choice (Johnson et al. 2012). This research illustrates how choice architecture can influence both the activation and weighting of the benefit goals used to assess the value of alternatives. Our research assumes that benefit goals are active prior to encountering any alternatives, hence, goal activation and weighting should be much less sensitive to choice architecture. Instead, these benefit goals alter the decision goal activities used to value and compare alternatives – an indirect priming effect (e.g., goals → decision goal processes → alternative evaluation). This goals → alternative distortion is not a common feature of goal-based choice models (e.g., Kruglanski et al. 2002; van Osselaer and Janiszewski 2012), though it is recognized as a phenomenon in the choice literature (Russo 2015). The first research

issue is what factors, beyond the conflict or complementarity of benefit goals, creates this indirect priming effect.

We propose there are three additional goal characteristics that might alter the execution of the activities that support the pursuit of decision process goals. First, the relative salience of benefit goals should influence the execution of activities supporting the pursuit of decision process goals. As the number of salient, orthogonal benefit goals increases, the difficulty of executing a decision process activity should increase. Second, the chronicity of benefit goals should lessen their impact on the execution of activities supporting the pursuit of decision process goals. Decisions that rely on chronic benefit goals should be well-practiced, hence, these types of benefits goals should exert less influence on the execution of a decision process activity. Third, the relevance of benefit goals to the choice context should moderate the influence of the benefit goals on the execution of activities supporting the pursuit of decision process goals. In our research, we used benefit goals relevant to the choice context. Specifically, we used thrift and prestige (conflicting) and prestige and have fun (complementary) goals in a vacation package and a car choice context. Pairs of benefit goals irrelevant to the choice context (e.g., eat tasty vs. healthy goals and a car choice task; risk avoidance vs. risk seeking goals and an entrée food choice) should not exert influence on the execution of a decision process activity.

A second research opportunity involves a more detailed consideration of adaptive choice processes that do not rely on changes in the alternatives or the choice rule. Adaptive choice processes have been attributed to characteristics of the choice architecture or how decision process goals impact choice strategies. We illustrate that choice processes can adapt even when these two factors are held constant. This is because a choice strategy consists of micro-tasks or activities. In our research, we simply inhibit or facilitate the use of these activities. Future research could investigate how to alter the order of these activities or how these activities are structured. For example, a common evaluation activity is to calculate a single value for a specific alternative. A less common evaluation activity is to calculate a min/max value that depends on the range of potential usage contexts. Conflicting benefit goals may inhibit an activity that generates a single value for a series of alternatives (see our results), but facilitate an activity that generates a min/max value for a series of alternatives. In the latter case, the conflicting goals are a source of information about how values might vary by context.

A third research opportunity involves investigating whether activating specific benefit goals could concurrently activate decision process goals and, by extension, if this concurrent activation might create a decision process goal conflict, as opposed to a benefit goal conflict. For instance, the activation of a safety benefit goal might concurrently activate a maximize accuracy goal (if we assume, for example, that when one wants safety, one will process attributes carefully.) Now, consider a consumer with a minimize effort goal. Activating a safety goal for this consumer might lead to a simultaneous activation of a maximize accuracy goal. If this happens, will the minimize effort goal have its activation reduced or will both decision process goals be simultaneously active? Does decision process goal conflict influence the extent to which a benefit goal is pursued? In this research, goal conflict was investigated in the realm of benefit goals. Investigating the potential effects of conflict in decision process goals might be a fruitful avenue for future research.

7.4 Conclusion

To summarize, we have highlighted how between benefit goals and decision process goals interact in consumer choice. When conflicting goals are active, the pursuit of both maximize accuracy and minimize effort decision process goals is inhibited. When complementary goals are active, the pursuit of a maximize accuracy decision process goal is facilitated and there is no effect on the minimize effort decision process goals since it is hard to make an efficient decision process more efficient (i.e., a floor effect). We hope to motivate further research that will both (1) consider the potential interactive effects of constructs other than goals involving the purportedly independence between outcomes vs. processes and (2) direct attention to process goals outside the adaptive selection of choice strategy context.

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9 APPENDIX

9.1 APPENDIX A - PRACTICE CHOICE TASK

In this study, we are interested in understanding how people make choices. Later in this survey, we will ask you to imagine yourself investigating different vacation packages, and cars, and choosing one of the options. However, you will first be told about how to make a choice in this survey. In the next page, there will be a tutorial showing you how you do your choice. After this tutorial, you will proceed to the first study of our survey.

You will see three different possible choices: option A, option B, and a choice to look to another option (option C). This will happen successively (you can decide to see a fourth (D), a fifth (E), a sixth (F), and several other options, if you want to).

If you want any of the options that are displayed, just select your preferred option and click the Arrow button. If you want to see more options other than the ones that are displayed, click "Look at another option before deciding". The other option will appear automatically. This pattern will be the same later in the survey.

You can choose to look to as many options as you want. You can also select an option at any point, including as your first choice. There are several options, but you do NOT have to look at all of them.

In the next page, you will be shown a list to get used to how you will make your choice later in the survey. Again, this is just a tutorial. After finishing the tutorial, you will be directed to the next part of this survey.

9.2 APPENDIX B - PROCESS GOAL MANIPULATIONS

Participants first read the following: When people make a choice, they make an effort-accuracy-tradeoff. Some people want to put in less effort because they simply want to get the choice done. Some people want to put in more effort because they want to be accurate.”

Participants in the maximize accuracy process goal condition also read:

“In this study, we are interested in learning why people want to be accurate when they make choices. Please list three reasons why you would want to be accurate when you make a choice. Examples of other people's responses are... (1) because I want to get something I really like; (2) because I want to make sure I get the best possible option.”

Participants in the minimize effort process goal condition read:

“In this study, we are interested in learning why people want to put in less effort when they make choices. Please list three reasons why you would want to put in less effort when you make a choice. Examples of other people's responses are: (1) because I simply want to get the choice done without wasting my time; (2) because I want to save energy for other activities.”

Participants in both conditions were given three boxes to list their why they would want to act in a goal consistent manner.

9.3 APPENDIX C - BENEFIT GOAL MANIPULATIONS

Prestige Benefit Goal

“Now, imagine that you have decided that having prestige should be a top priority in life. Being prestigious and pursuing status - when making simple or complex decisions - can significantly boost your self-esteem and reputation. Imagine that instead of worrying about how you are spending your money, or worrying if you should stick to a particular budget, you will always try to focus on achieving a prestigious outcome. You will do this for current and future decisions. Please list three reasons why prestige would be important to you and how this would positively impact your life in the future. Examples of other people's responses are... (1) because I want to feel powerful and important. This makes me happier with myself; (2) you only live once. After all, money is meant to buy things. I want to be the best.”

Thrift Benefit Goal

“Now, imagine that you have decided that being thrifty should be a top priority in life. Being frugal and saving money - when making simple or complex decisions - can significantly boost your quality life and financial well-being. Imagine that instead of spending money on things you do not really need, or being extravagant, you will try to be thrifty. You will do this for current and future decisions. Please list three reasons why being thrifty would be important to you and how this would positively impact your life in the future. Examples of other people's responses are... (1) because I don't want to deal with overwhelming debt every month; (2) because I often buy things I don't really need and I feel regret when looking at my budget.”

Have Fun Benefit Goal

“Now, imagine that you have decided that having fun should be a top priority in life. Having fun and embracing playfulness in your life - when making simple or complex decisions - can significantly boost your overall well-being and life satisfaction. Imagine that instead of taking things too seriously, and seeing the things you do as obligations, you will always try to focus on the fun of side of what you do. You will do this for current and future decisions. Please list three reasons why having fun would be important to you and how this would positively impact your life in the future. Examples of other people's responses are... (1) because I want to be happy in every single aspect of my life; (2) because seeing the fun side of life can make you enjoy things you usually don't feel like doing.”

Similar to the process goal manipulation, participants in each of the conditions were given three boxes to list their why they would want to act in a goal consistent manner.

9.4 APPENDIX D - PRODUCT REPLICATES

VACATION PACKAGES STIMULI

<p>Fiji Hideaway Resort & Spa - 7 nights with flight \$2861 (Coral Coast Area). Roundtrip airfare on Fiji Airways, 7 nights' accommodation at Fiji Hideaway Resort & Spa in a Frangipani Bure.</p>	<p>Hotel Palazzo Giovanelli & Gran Canal - 3 nights with flight \$1732 (Venice, Italy). Reduced rate, Includes daily buffet breakfast.</p>	<p>The Westin New York at Times Square - 3 nights with flight \$883 \$856 (Times Square). This plush hotel is set at the dazzling heart of New York, close to Broadway, museums and upscale shopping.</p>
<p>Mauna Lani Bay Hotel & Bungalows - 3 nights with flight and car \$1037 \$876 (Kohala Coast, Hawaii). Discount, Ocean View, Includes EXCLUSIVE up to 5-Day FREE mid-size car rental.</p>	<p>SAVOY - 4 nights with flight \$1214 \$876 (Rome) 27% OFF! 4th night FREE, Includes daily breakfast for ALL, Kids 7 & younger stay FREE.</p>	<p>Blue Lagoon 7 Night Cruise - 7 nights with flight \$3962 (Fiji). Lagoon Cruises in a Hibiscus Deck, all meals, morning and afternoon tea, cruise entertainment, shore excursions and activities included in the cruise schedule.</p>

<p>Hyatt Zilara Cancun - 3 nights with flight \$2882+ (Cancun, Mexico). Oceanfront Junior Suite, Adults Only, All-Inclusive includes all meals, drinks, activities.</p>	<p>Beaches Turks & Caicos Resort Villages & Spa - 3 nights with flight \$2702 (Turks & Caicos, Caribbean). Luxury Included Family Vacation, Includes all meals, unlimited premium spirits & activities.</p>	<p>The Confidante - By Hyatt - 3 nights with flight \$384 (Miami Beach, Florida). Exclusive \$50 Off per booking, Stays of 5 nights or longer receive Exclusive \$100 Off per booking.</p>
<p>Sheraton Baganvillas Resort & Convention Center - 3 nights with flight \$409 (Puerto Vallarta, Mexico). Exclusive \$100 Off per booking, Kids 12 & younger stay FREE, FREE Wi-Fi.</p>	<p>Sheraton Puerto Rico Hotel & Casino - 3 nights with flight \$539 \$498 (Old San Juan, Puerto Rico). 20% off on Zen spa treatment, FREE Wi-Fi, Kids 17 & younger stay FREE.</p>	<p>Mystique, A Luxury Collection Hotel - 3 nights with flight \$2276 (Santorini, Greece). A one-of-a-kind quintessential Cycladic experience on the iconic Greek island of Santorini. A liquor and welcome platter upon arrival.</p>
<p>Walt Disney World Dolphin - 3 nights with flight \$937 \$707 (Disney). Cheap! Exclusive \$50 Off per booking</p>	<p>Flamingo Las Vegas - 3 nights with flight from \$352 (Las Vegas). A self-contained casino and resort offering everything a vacationer could want.</p>	<p>Hilton San Diego Bayfront - 3 nights with flight \$466 (San Diego Bay Front, CA). Port/Coronado Bridge View, Stays of 5 nights or longer receive Exclusive \$100 Off.</p>

CARS STIMULI

<p>2012 Toyota Camry - XLE FWD - \$11,500 (Used)</p>	<p>2017 Jaguar F-PACE S - AWD S 4dr SUV - \$42,000 (New)</p>	<p>2017 Chevrolet Malibu LS - LS 4dr Sedan - \$19,800 (New)</p>
<p>2017 Subaru WRX STI Limited - AWD STI Limited 4dr Sedan - \$31,700 \$29,700 (New)</p>	<p>2008 Honda Accord LX - LX 4dr Sedan 5A - \$9,575 \$8,595 (Used)</p>	<p>2017 Land Rover Range Rover Sport SVR - AWD SVR 4dr SUV - \$89,989 \$85,989 (New)</p>
<p>2007 Ford Escape - XLS AWD 4dr SUV (2.3L I4 5M) - \$5,420 \$4,780 (Used)</p>	<p>2014 BMW 5 Series 550i xDrive - AWD 550i xDrive 4dr Sedan - \$34,000 (Used)</p>	<p>2017 Hyundai Elantra - SE - \$17,800 (New)</p>
<p>2016 Porsche 911 - Turbo S Cabriolet - \$178,000 (New)</p>	<p>2017 Nissan Sentra SV - SV 4dr Sedan - \$13,915 (New)</p>	<p>2015 Mitsubishi Lancer ES - ES 4dr Sedan CVT - \$8,977 (Used)</p>
<p>2008 Volvo S80 T6 - AWD T6 4dr Sedan Luxury - \$8,900 (Used)</p>	<p>2017 Jeep Cherokee - Altitude - \$22,390 (New)</p>	<p>2017 Ford Taurus SEL - SEL 4dr Sedan - \$26,734 (New)</p>

9.5 APPENDIX E – QUALTRICS SURVEY (STUDY 1)

This Appendix is intended to show how the survey was structured in Qualtrics, which was the platform used for the data collection.

Introduction

Thank you for your participation. You will be required to complete three different studies. Your identity will not be required and/or revealed in any of these studies. The results will be reported in aggregated form only. Please, do not use your mobile phone and avoid getting distracted during your participation in this study, which will take approximately 10 minutes. There are no right or wrong answers. Be as honest as possible in your answers. We need you to concentrate in this survey. The quality of our results depends on how seriously you respond to the questions. We appreciate your attention. We will check the data before approving survey codes. We will not approve payment for workers who provide random or nonsense responses. Please have this in mind should you decide to proceed. You will be required to provide your Worker ID. If you do not want to participate, please close the survey window. Please enter your MTurk Worker ID in the box below.

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Page Break

Tutorial Menu

See Appendix A.

Page Break

- Option A
- Option B (first page)
- Option C (second page)
- Option D (third page)
- Option E (fourth page)
- Option F (fifth page)
- Option G (sixth page)

These are all the options. Please select an option from the list above.

Page Break

Since you selected one of the options, you finished the tutorial choice task. Please click the Arrow button to proceed to the next part of this survey.

Page Break

Process Goal Manipulation

See Appendix B.

1st Reason: _____

2nd Reason: _____

3rd Reason: _____

Page Break

Benefit Goal Manipulation

See Appendix C.

1st Reason: _____

2nd Reason: _____

3rd Reason: _____

Participants in the “No Benefit Goal” condition were given the following:

This study aims to investigate people's cognitive ability. In the box below, list as many words as possible with the letter e in the middle. For example, "apartment" or "water".

List the words in the box below:

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Page Break

Replicates – Cars and Vacation Packages Presentation

Vacation Packages:

In this study, we are interested in how people make choices of vacation packages. We want you to imagine yourself investigating different vacation packages. There are 15 different vacation packages. Every package is unique and very different from the others. Take a moment to remember the instructions you received earlier in this survey. You have to follow these instructions. You can choose to see as many vacation packages as you want before deciding, but you do not have to look at all of them if you don't want to.

Page Break

See Appendix D, Vacation Packages Table.

Cars:

In this study, we are interested in how people make choices of cars. We want you to imagine yourself investigating different cars. There are 15 different cars. Some of them are used and some are new. Take a moment to remember the instructions you received earlier in this survey. You have to follow these instructions. You can choose to see as cars as you want before deciding, but you do not have to look at all of them if you don't want to.

Page Break

See Appendix D, Cars Table.

Measures

We'd now like to ask you some general questions about how you felt during or after completing the vacation package choice task.

Page Break

(Order of the questions was randomized. Not every question was necessary in the analyses.)

During the car (vacation package) choice task...

How enjoyable was the choice process?
(1 – Not at all, 9 – Very much)

How interesting was the choice process?
(1 – Not at all, 9 – Very much)

How difficult was the choice process?
(1 – Very easy, 9 – Very difficult)

Page Break

After the completion of the car (vacation package) choice task...

All in all, how satisfied were you with your choice?
(1 – Not at all, 9 – Very much)

If I had to decide among the same options once again, the probability of making the same choice is:
(1 – Very low, 9 – Very high)

How pleased were you with your choice?
(1 – Not at all, 9 – Very much)

Page Break

During the car (vacation package) choice task, how focused were you in...

Choosing a fun car?
(1 – Not at all focused, 9 – Very focused)

Choosing a prestigious car?
(1 – Not at all focused, 9 – Very focused)

Choosing a cheap car?
(1 – Not at all focused, 9 – Very focused)

Being as accurate as possible in your choice?
(1 – Not at all focused, 9 – Very focused)

Putting in as less effort as possible in your choice?
(1 – Not at all focused, 9 – Very focused)

Page Break

Click the button below to finish the survey and receive your HIT completion code.

Survey End.

Study 2 was similar, except for the pair of benefit goals used (Having Fun was used instead of Thrift). Studies 3a and 3b were also similar, but one-goal conditions were also used (either thrift-only or prestige-only). Moreover, additional measures were also used (mediators and alternative explanations). Study 4 was similar to studies 3a and 3b, but complementary goals were used.