



Differences between making decisions for the self versus for others: A reversal of the choice overload effect

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DIFFERENCES BETWEEN MAKING DECISIONS FOR THE SELF VERSUS FOR
OTHERS: A REVERSAL OF THE CHOICE OVERLOAD EFFECT

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In both organizational and social arenas, people make decisions for themselves and for other people. But research in decision making has provided little input into how these decisions are psychologically different. In this paper, I propose that decisions—depending on whether people are deciding for themselves or others—vary according to regulatory focus, such that, people who make decisions for themselves are in a prevention focus, whereas people who make decisions for others are in a promotion focus. Drawing on regulatory focus, in particular work on errors of omission and commission, I hypothesize that people who make decisions for others experience a reversal of the choice overload effect. In seven studies, including a field study and a mini meta-analysis, I found that people who make decisions for themselves are less satisfied after selecting among many compared to few options, yet, people who make decisions for others are more satisfied after selecting among many compared to few options. Implications and suggestions for other differences in self-other decision making are discussed.

BIOGRAPHICAL SKETCH

Evan Polman came to Cornell in 2005 to study organizational behavior. In that year, the department of organizational behavior held an informal reception for students and faculty. Although receptions are held every year, it was in that year, and in one other that the department played the game, “two truths and a lie.” Both times, Evan was too nervous to play. However, in keeping with the spirit of this Biographical Sketch, Evan plays the game here and offers up three interesting “facts” about his life—two that are true and one that is completely false.

(1) Evan attended a variety of different schools such as public, private, international, American, boarding, and even all-girls.

(2) Evan has had three songs written and recorded about him by two different artists.

(3) Ostensibly a desirable target among muggers, Evan has been robbed at knife-, club-, and gun-point.

ACKNOWLEDGMENTS

One observation I can make about earning a Ph.D is that the time it takes to complete passes remarkably fast. Others may disagree, but few have had the privilege to work with Professor Jack Goncalo. To be sure, Jack has taught me how to think about problems, find solutions, and communicate ideas to others. But what has been most valuable, is the excellent example Jack has set for me to follow in my future career. I may not have been a model student—often I would write and research without seeking, and sometimes ignoring the advice of others—but Jack has always been patient, and for better or worse, allowed me a certain level of academic freedom. This, plus the time and energy that he invested in my development, inside and outside the classroom, cannot be repaid. It was an honor being Jack’s first student, and I hope that I can do for others a portion of what Jack has done for me. Indeed, any future academic success that I might have is a credit to the training and mentorship that Jack has provided.

I would also like to thank the other members of my special committee: Professors Jay Russo, Michele Williams, and Brian Wansink. Their comments on this dissertation and discussions were critical in preparing it in its final form—I’m especially grateful for their willingness to review drafts at the last minute. In addition, I would like to thank Jay and Michele for their open collaboration. Both have been extremely approachable and amenable to sharing ideas. Because of my committee, my time at Cornell has not only been productive but also enjoyable. I cannot express how much I have valued working with each of you—I hope it continues into the future.

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CHAPTER 1

INTRODUCTION

People are hired, even elected, to make decisions on behalf of others—consultants, politicians, and board members are three examples. And the quality and success of their decisions depend on the amount and type of information that is considered during the decision process (Payne, 1976). We might think at first glance that people who make decisions on behalf of others are less enmeshed in decisions and therefore more objective in assimilating and construing information. Put differently, people who make decisions for others may suffer fewer cognitive biases. A lawyer, for example in a divorce proceeding, may see the opposition's argument more clearly than a client; or a real estate agent may more accurately generate a selling price than an owner. It is possible, however, that the net effect of deciding for others is accompanied with greater, not fewer systematic biases, and that the two examples provided here represent exceptions to this rule.

Indeed, a small but growing research stream has documented cognitive biases among decision makers who specifically choose on behalf of others, and reported that (1) judging harmful actions as worse than equally harmful inactions (cf., omission bias; Zikmund-Fisher, Sarr, Fagerlin, & Ubel, 2006), (2) favoring information that confirms preconceptions (cf., confirmation bias; Jonas, Shulz-Hardt, & Frey, 2005), (3) weighting decision attributes more prominently than others (cf., lexicographic weighting; Kray, 2000), and (4) biasing information in support of a developing preference (cf., predecisional distortion; Polman, 2010) are greater among decision makers who decide on others' behalves in relation to their own behalves. Although it

is evident that decision making is different when people decide for others compared to when people decide for the self, it is not fully understood why these differences occur.

The current research investigates whether self-other differences in decision making can be explained by construal level theory (i.e., psychological distance; Liberman & Trope, 2003; 2008). By drawing on recent research that has connected construal level theory with regulatory focus theory (Mogilner, Aaker, & Pennington, 2008; Pennington & Roese, 2003), this dissertation seeks to understand how, why, and under which conditions differences in regulatory focus occur among decision makers—juxtaposed to a context in which decision makers choose among either many or few options. On account of the possibility that some of the decision heuristics and biases are enhanced, reduced, non-existent or even reversed when decisions are made on behalf of others, I explore how one particular phenomenon, *choice overload* (i.e., experiencing more satisfaction after choosing among few compared to many options; cf., Iyengar & Lepper, 2000), operates in decisions that are made on behalf of others. Specifically, this dissertation addresses two questions: Does a different regulatory focus trigger among decision makers who decide on others' behalves compared to their own behalves? And does experiencing a different regulatory focus cause decision makers to be more, or less satisfied, after choosing among many options?

Psychological Consequences of Self-Other Decision Making

One area of research that has highlighted a critical difference between making decisions for the self and making decisions on behalf of others is construal level theory, which states that psychologically distant items (e.g., future plans, i.e., temporal distance; e.g., faraway places, i.e., spatial distance) are represented in more abstract and simple terms than items that are psychologically close (Liberman & Trope, 1998). For example, in thinking about a camping trip that is scheduled for next year, participants classify camping items (e.g., potato chips, hot dogs) into fewer categories

than participants who think about a camping trip that is scheduled for next weekend (Lieberman, Sagristano, & Trope, 2002). That is, in thinking about the distant future, people evaluate items more abstractly and hence use fewer and broader categories to classify items. In another example, it has been shown that *social distance* (e.g., the difference between deciding for the self and somebody else) increases the tendency that people will construe others in abstract ways (Liviatan, Trope, & Liberman, 2008; Pronin & Ross, 2006; Wakslak, Nussbaum, Liberman, & Trope, 2008). In particular, research has shown that people perceive their future selves in more abstract terms than they perceive their present selves (Nussbaum, Trope, & Liberman, 2003). Moreover, people ascribe concrete variables to their present selves' behaviors, yet ascribe abstract variables to both their future selves' and others' behaviors (Pronin & Ross, 2006).

By applying social distance to decision making, Pronin, Olivola, and Kennedy (2008) found that the decisions that people make for their future selves mirror the decisions that people make on behalf of others. In their study, participants indicated how much of a disgusting liquid that they would drink in the present moment or in the next semester; and in a separate condition, participants decided how much another participant would drink. To wit, participants who decided for others indicated the same amount as participants who decided for their future selves, whereas participants who chose for their present selves indicated that they would drink a significantly smaller amount (Pronin et al., Study 1). In other words, the decisions that people make for their future selves resemble the decisions that people make for others (and together differ from the decisions that people make for their present selves). Based on this finding, we might conclude that there is a veritable social distance between choosing for the self and choosing for somebody else. In fact, along these lines, recent research

by Borovoi, Liberman, and Trope (2010) instructed participants to choose either for themselves or for others as a way to manipulate social distance.

Recent research suggests that social distance can also cause shifts in regulatory focus, suggesting that construal level theory and regulatory focus theory are interrelated (Mogilner et al., 2008; Pennington & Roese, 2003). According to regulatory focus theory, there are two basic motivational orientations that individuals adopt in the process of making a decision: promotion focus and prevention focus (Higgins, Shah, & Friedman, 1997). Individuals in a promotion focus are sensitive to the presence and absence of positive outcomes, whereas individuals in a prevention focus are sensitive to the presence and absence of negative outcomes. Pennington and Roese (2003) found that as psychological distance increases, so too do promotion related concerns. Specifically, people show more promotion focused concerns (e.g., getting a high score on a test) after thinking about a test that would take place in two weeks, in contrast to a test that would take place later that day (Pennington & Roese, Study 1). In a more recent study, Mogilner et al. (2008) also showed evidence for construal level shifts in promotion and prevention related concerns. In particular, they found that participants were willing to pay more for a distant future vacation if the information about the vacation was promotion focused rather than prevention focused; and vice versa, participants were willing to pay more for a last minute vacation if information about the vacation was prevention focused rather than promotion focused (Mogilner et al., Study 2).

With this relation between regulatory focus and psychological distance in mind, we might expect that when people make decisions for themselves (i.e., personal decision makers), social distance is set to zero and a prevention focus is triggered, whereas when people make decisions for others (i.e., proxy decision makers), social distance is greater than zero and a promotion focus is triggered. This reasoning is in

fact consistent with existing research. For example, Beisswanger, Stone, Hupp, and Allgaier (2003) found in a study on risk taking in relationships, that individuals encourage their friends to take risks that they themselves would not take, such as going out on a blind date. Of import, proxy decision makers gave more *positive* reasons compared to personal decision makers, and vice versa, personal decision makers gave more *negative* reasons compared to proxy decision makers. In another example, Jonas et al. (2005) found that proxy decision makers pursue more positive (i.e., supportive) information than personal decision makers. Together, these findings appear to be consistent with the behaviors one would expect from individuals who are in a particular regulatory focus. Thus, by incorporating regulatory focus with self-other decision making, I hypothesize:

Hypothesis 1: Proxy decision makers will be more promotion focused than personal decision makers.

Hypothesis 2: Personal decision makers will be more prevention focused than proxy decision makers.

If decisions for others trigger a shift in regulator focus, then there may be considerable implications for a wide range of psychological processes. For example, relative to a prevention focus, a promotion focus has been found to increase creativity, self-control, and success in negotiations (Dholakia, Gopinath, Bagozzi, & Natarajan, 2006; Friedman & Förster, 2001; Galinsky, Leonardelli, Okhuysen, & Mussweiler, 2005). Likewise, relative to a promotion focus, a prevention focus has been found to increase local processing, independent self-construals, and vigilance (Förster & Higgins, 2005; Idson, Liberman, & Higgins, 2000; Lee, Aaker, & Gardner, 2000). Particularly relevant to research on decision making is that a shift in regulatory focus makes decision makers more concerned with committing errors of omission in a promotion focus, and errors of commission in a prevention focus (Crowe & Higgins,

1997). And extending this to self-other decision making might explain the mixed findings concerning the varying levels of satisfaction that decision makers experience after choosing among many options.

That is, according to regulatory focus, individuals' level of motivation varies to the degree that individuals orient away from the *presence of a negative outcome* (error of commission), or alternatively, away from the *absence of a positive outcome* (error of omission). Furthermore, individuals' level of motivation varies according to the fit between regulatory focus and a concern to minimize errors of omission and commission (Higgins, 2000). In the parlance of making a choice among options in an array, an error of commission is an unsatisfying yet present option, and an error of omission is a satisfying yet absent option. Consistent with regulatory focus, promotion focused individuals are concerned with securing satisfying options (i.e., avoiding errors of omission), whereas prevention focused individuals are concerned with avoiding unsatisfying options (i.e., avoiding errors of commission).

In the context of choice, fewer options imply more omissions (and errors thereof), and likewise, more options imply more commissions (and errors thereof). Thus, among individuals in a promotion focus who are sensitive to committing errors of omission, a limited array should indicate that satisfying options are absent, whereas among individuals in a prevention focus who are sensitive to committing errors of commission, an extensive array should indicate that unsatisfying options are present. In this vein, a promotion focused individual will feel more satisfied after choosing from an extensive array because an extensive array *precludes* errors of omission (i.e., "With so many items available, the best items must also be available"). In contrast, a prevention focused individual will feel less satisfied after choosing from an extensive array because an extensive array *produces* errors of commission (i.e., "With so many items available, the worse items must also be available"). Said differently, the

difference in satisfaction between an extensive and a limited array depends on individuals' orientation toward outcomes that are positive (i.e., "best items") or away from outcomes that are negative (i.e., "worse items")—a motivation that stems directly from individuals' regulatory focus; in particular, individuals' motivation for avoiding errors of omission and commission. In sum, I hypothesize:

Hypothesis 3: Personal decision makers will experience more satisfaction after choosing among few compared to many options.

Hypothesis 4: Proxy decision makers will experience the reverse (i.e., more satisfaction after choosing among many compared to few options).

To be sure, these hypotheses dovetail with a recent meta-analysis carried out on the relation between satisfaction and the number of options that decision makers choose among (Scheibehenne, Greifeneder, and Todd, in press). Specifically, Scheibehenne et al. examined the mixed findings surrounding decision makers' satisfaction after choosing among either many or few options. On one hand, choosing among many options is considered a fundamental axiom in economics to enhance well-being, and in fact, has been shown to increase positive outcomes such as purchase behavior, consumption, and satisfaction (Anderson, Taylor, & Holloway, 1966; Khan & Wansink, 2004; Koelemeijer & Oppewal, 1999). Indeed, having many options reduces the cost of searching for more options, makes it easier to get a sense of the overall quality among options, and increases decision makers' freedom of choice (Eaton & Lipsey, 1979; Hutchinson, 2005; Reibstein, Youngblood, & Fromkin, 1975). On the other hand however, some research in psychology has found that choosing among many options leads to negative affective responses such as regret, pessimism, demotivation, and ultimately choice withdrawal (e.g., Iyengar & Jiang, 2004; Iyengar & Lepper, 2000; Iyengar, Wells, & Schwartz, 2006; Schwartz, 2004). In their review of this research, Scheibehenne et al. found that the net effect (i.e., the strength) of

choice overload is virtually zero—that is, the average effect size reported in papers supporting choice overload is nearly identical to the average effect size in papers finding no support for, or alternatively the reverse of, choice overload. As the authors note, in order to explain the effect of choice overload, it is essential to search for moderators.

To this end, I build off and extend previous investigations of choice overload as well as answer Scheibehenne et al.’s call by investigating whether a hitherto unexplored moderator, self-other decision making, influences choice overload. Although much research has investigated choice overload, the research has focused on only one particular type of decision—a decision made for the self—and has not yet explored how the availability of choice affects decisions that people make for others. This is a critical distinction because in the real world, important decisions are often made on behalf of others (Yates, 1990), moreover, these decisions occur in an incredible range of contexts: CEOs make decisions on behalf of employees; generals on behalf of their troops; teachers on behalf of their students; parents on behalf of their children; members of corporate boards on behalf of shareholders; lawyers and financial planners on behalf of their clients; doctors on behalf of patients; and one spouse on behalf of the other. There may, however, be conditions in which the effect of self-other decision making on choice overload is less than straightforward, such as in the case when decision makers are accountable for their decisions.

Accountability

Accountability is defined as ‘‘being answerable to audiences for performing up to certain prescribed standards, thereby fulfilling obligations, duties, expectations, and other charges’’ (Schlenker, Britt, Pennington, Murphy, & Doherty, 1994, p. 634). Decisions for the self are typically private, whereas decisions for others are, by virtue, public; a distinction between private and public decision making is important for three

reasons: First, compared to decisions for the self, decisions for others may foster different emotions such as embarrassment or pride. (Larrick, 1993; Simonson, 1989; Tetlock, 1985). Second, provided decision makers are aware that they will be forced to justify a decision to others, the decision itself may be qualitatively different than if decision makers are not aware that they will be forced to justify it (Lerner & Tetlock, 1999); and finally, third, decisions for others will vary according to whether the preferences for whom a decision is made are known or not (Lerner & Tetlock, 1999). When others' preferences are known, decisions made on behalf of others will shift in line with those preferences, however, when others' preferences are not known, decisions tend to be characterized by high integrative complexity (Tetlock, 1985); that is to say, when others' preferences are not known, decision makers tend to think more deeply of their decisions than if others' preferences are known.

To the extent that decision makers are held accountable for their decisions, it is reasonable to assume that self-other differences in decision making with respect to regulatory focus would disappear. Because of accountability, decision makers may receive blame from individuals who are affected by their decisions (Singer & Endreny, 1993) or experience feelings of guilt resulting of poor decisions (Stone, Yates, & Caruthers, 2002). As an example, Casarett and Ross (1997) found that doctors sometimes make cautious decisions for their patients that are not consistent with patients' predilections, for fear of feeling guilty after making decisions that are consistent with patients' preferences. In another example, participants who were asked to represent and make decisions for constituents in a resource distribution game experienced more regret and behaved more carefully than participants who made decisions for themselves (Hibbing & Alford, 2005). Taken together, these findings suggest that when people are held accountable for the decisions that they make for

others, attention is drawn to a presence of negative information (e.g., fear, guilt, regret, caution; see also Crowe & Higgins, 1997). Put differently, I hypothesize:

Hypothesis 5: A prevention focus will activate among proxy decision makers who feel accountable for their decisions.

In line with the logic in support of Hypothesis 4 that states that a prevention focus is related with experiencing choice overload, it follows that:

Hypothesis 6: Choice overload will be experienced among proxy decision makers who feel accountable for their decisions.

In sum, virtually no work has investigated whether people attend to qualitatively different information according to whether they are deciding for themselves or for others. Beisswanger et al. (2003) and Jonas et al. (2005) found that proxy decision makers occupied themselves more with positive information than personal decision makers. I extend their findings by providing a theory that explains why decisions for others elicit attention to positive information, but also, why decisions for the self elicit attention to negative information. I predict that decisions for others and decisions for the self differ according to decisions makers' regulatory focus, and that a promotion focus is activated among proxy decision makers, whereas a prevention focus is activated among personal decision makers. This means personal decision makers may experience choice overload, because they are motivated to avoid errors of commission which naturally evidence more in extensive arrays, whereas proxy decision makers may experience a reversal of choice overload, because they are motivated to avoid errors of omission which naturally evidence more in limited arrays.

CHAPTER 2

OVERVIEW OF STUDIES

The current research examines self-other decision making in a choice overload context, and investigates whether post-choice satisfaction and regulatory focus vary according to decision maker role (personal versus proxy) and how many choices are available (many versus few). In Study 1, participants chose paint swatches with the prediction that among participants who choose for somebody else, a reversal of the choice overload effect would be observed. Participants who choose paint swatches for others would experience greater satisfaction after choosing among many compared to few swatches, whereas participants who choose for themselves would evidence the choice overload effect and experience greater satisfaction after choosing among few compared to many swatches. Study 2 investigates and extends the findings from Study 1 to a field setting. Customers from two different wine stores varying in size (small versus large) were asked whether they were buying wine for themselves or for others, and how satisfied they were with their purchases. In line with Study 1, I predicted that customers who buy wine for others would experience more satisfaction given they purchase from the large store (i.e., select among many options), whereas customers who buy wine for themselves would experience more satisfaction given they purchase from the small store (i.e., select among few options).

Studies 3a and 3b were carried out with two goals in mind. The first goal was to replicate the results of Studies 1 and 2 using different manipulations and measures. The second goal was to test whether regulatory focus causally mediates the relation between self-other decision making and choice overload. Spencer, Zanna, and Fong (2005) proposed that strong inferences of a causal chain can be made if the

independent variable and mediating variable are both manipulated. To that end, self-other decision making and regulatory focus were independently manipulated. Specifically, the effect of self-other decision making on regulatory focus was investigated in Study 3a—participants responded to scenarios concerning decisions that they would make for themselves or for others (for a list of the scenarios, see Beisswanger et al., 2003); following that, participants responded to items comprising the Regulatory Focus Questionnaire (RFQ; Higgins et al., 2001), a validated scale that measures participants' promotion and prevention focus. In complement to Study 3a, the effect of regulatory focus on choice overload was investigated in Study 3b—participants' regulatory focus was manipulated by instructing participants to write about their hopes and aspirations, or alternatively, their duties and obligations. The former induces a promotion focus, whereas the latter induced a prevention focus (Higgins, Roney, Crowe, & Hymes, 1994). Then, participants chose among different flavors of ice cream, with some participants choosing among few flavors, and others choosing among many flavors. I predicted in Study 3a that proxy and personal decision makers evidence a promotion focus and prevention focus respectively, and that in Study 3b, a prevention focus would lead people to experience greater satisfaction after selecting among few ice cream flavors, whereas a promotion focus would lead people to experience greater satisfaction after selecting among many ice cream flavors.

In the next two studies, two moderators relevant to self-other decision making were tested. First, in Study 4, social distance was manipulated. I suggested earlier that personal and proxy decision makers experience a different regulatory focus because of construal level theory. I thus manipulated social distance to see whether proxy decision makers who include others into the concept of the self (i.e., experience low social distance between self and other; interdependent self-construal; Triandis, 2001)

evidence a prevention focus, and by that account, experience choice overload. This notion is consistent with research showing that an interdependent self-construal is related to more emphasis on prevention focused information (Lee et al., 2000). Specifically, participants in Study 4 were asked to carry out a circle-the-pronoun task that has been used in other research to elicit an interdependent or independent self-construal (e.g., Gardner, Gabriel, & Lee, 1999; Kuhnén & Oyserman, 2002). Next, participants were asked to select a paint swatch among either many or few options as in Study 1; then finally, participants generated responses to the extent that they endorsed certain proverbs—an exercise that has been validated to measure regulatory focus (van Stekelenburg, 2006; e.g., Faddegon, Scheepers, & Ellemers, 2008).

Study 5 was carried out to shed light on the effects of accountability in self-other decision making. As with self-construal, accountability is related to more emphasis on prevention focused information. Tetlock (1985) suggested that when people are held accountable they simultaneously behave vigilantly; and vigilance is a sign of a prevention focus (Crowe & Higgins, 1997). Specifically, in this study, students in a class selected courses for the following semester for either themselves or somebody else, and from either a small or large array of courses. To manipulate accountability, half of the students were informed that they would have to justify their class choices to the professor of the class, the other half of students were instructed to generate reasons anonymously without having to justify their class choices to the professor. Students also filled out the same instrument used in Study 4 measuring their endorsement of proverbs, and hence regulatory focus. I predicted that under conditions of accountability, a prevention focus would be activated, and therefore, both personal and proxy decision makers would experience choice overload.

Finally, in the last study I conducted a mini meta-analysis of Studies 1, 2, 4, and 5 in order to assess the reliability of the relative strength of the reverse choice

overload effect among decisions that people make for others. Thus across seven studies, including one field study and one mini meta-analysis, participants faced four different kinds of choices, furthermore, these choices ranged from completely hypothetical (paint swatches; ice cream flavors) to ostensibly real (courses) to absolutely real (wine). In short, I predict that choices for others produce a reversal of the choice overload effect (Study 1 and 2)—on account of the different regulatory focus that is elicited by people who make decisions for themselves and for others (Study 3a and 3b)—and that social distance and accountability moderate this relationship (Study 4 and 5).

CHAPTER 3

STUDY 1

In this first study, participants were instructed to choose a paint color from either a limited or an extensive array of paint swatches. Half of the participants made selections for themselves, the other half made selections for somebody else. The main dependent measure was participants' post-choice satisfaction.

Method

Participants and Procedure. One hundred and sixty-eight undergraduates agreed to participate in exchange for extra credit. Provided with paint swatches, participants were asked to select a color that they would like to use in either their bedroom or in somebody else's bedroom. The number of colors that participants could choose from varied, such that participants could choose among either 8 colors or 35 colors. After selecting a paint color, participants answered two likert questions from 1 (*not at all*) to 9 (*extremely*) that measure satisfaction ("How satisfied are you with the paint color you picked?" and "How much do you regret choosing the color you selected?"). After reverse scoring the second question, these items were combined into one scale ($\alpha = .84$).

Results and Discussion

I hypothesized an interaction between choice array and for whom an individual is choosing with respect to how satisfied individuals are with their final choices. In order to test this, I conducted a 2 (decision maker role: personal versus proxy) X 2 (choice array: few versus many) ANOVA on participants' satisfaction, which revealed the predicted significant interaction, $F(1, 121) = 9.63, p < .01$. Participants who chose for themselves reported more satisfaction after they were presented with few options

($M = 6.65$) compared to many options ($M = 5.84$), $t(63) = 2.22, p < .05$; this is consistent with Iyengar's research on the choice overload effect (Iyengar & Lepper, 2000). However, as I predicted, the reverse occurred among participants who chose for others. Faced with this decision, participants reported more satisfaction after they chose among many options ($M = 7.10$) compared to few options ($M = 6.28$), $t(58) = 2.17, p < .05$. No main effects were significant, however, a marginal effect of decision maker role showed that participants who chose for others experienced slightly more satisfaction ($M = 6.69$) compared to participants who chose for themselves ($M = 6.25$), $F(1, 121) = 2.88, p = .09$.

These findings suggest that choosing for others produces a reversal of the choice overload effect. Individuals who chose for others were more satisfied after choosing among many compared to few options. Conversely, individuals who chose for themselves were more satisfied after choosing among few compared to many options. Research on regulatory focus can potentially explain these findings. The role of regulatory focus was examined further in Studies 3-5, but before reporting on those studies, Study 2 was carried out to determine if the results from Study 1 would apply to a field setting.

CHAPTER 4

STUDY 2

This study was carried out to replicate the findings from Study 1, as well as examine if the findings extend beyond the laboratory to a field setting. In this study, customers from both a small and large wine store were approached and asked about their satisfaction with their wine purchases, as well as for whom they were purchasing (self versus other). A study such as this one is pertinent to the present work because the persons for whom choices were made were real and willfully conducted. In contrast, the choices and decision maker roles in Study 1 might be considered ambiguous, being that the choices were hypothetical and the decision maker roles were potentially artificial—Study 2 overcomes this limitation by testing the hypotheses in a scenario with real choices for people of customers' preordained choosing.

Method

Sample and Procedure. Sixty-eight customers from two wine stores in a small city (population = 29,000) in upstate New York were approached and asked if they would be willing to answer two short questions about their wine purchases; sixty of those customers agreed, signifying a response rate of 88%. The wine stores differed according to size and stock. The small store—representing a decision with few choices—is about 400 square feet; the large store—representing a decision with many choices—is roughly ten times the size of the small store. Interviews at each store were conducted one week apart on a Saturday from 4-6PM. Exactly 30 data points were collected at each store; although there were no differences between stores with respect to the number of male or female customers, or for whom customers were buying, there

was an overall difference for whom customers were buying such that customers from both stores were more likely to purchase wine for themselves (.70) than for others (.30), $\chi^2(1, N = 60) = 9.60, p < .01$

Measures. Upon agreeing to participate, customers were asked two questions which were counterbalanced. One question was about the person(s) for whom the wine was for, “Did you buy the wine for yourself or for somebody else?”. The other question was about customers’ satisfaction, “On a scale from one to eleven—from not satisfied to extremely satisfied—how would you rate your satisfaction with your purchase?”. The experimenter recorded customers’ answers as well as their gender and then debriefed each customer by explaining the hypotheses of the study.

Results and Discussion

Preliminary analyses showed that order of questions and gender of customer did not predict customers’ satisfaction or for whom they were buying wine, thus the data were collapsed across both of these factors.

In keeping with Study 1, I predicted an interaction between the number of available wine choices, and for whom customers were purchasing with respect to the satisfaction customers experience. To test this, I conducted a 2 (decision maker role: personal versus proxy) X 2 (store size: small versus large) ANOVA on customers’ satisfaction, which revealed the predicted significant interaction, $F(1, 56) = 12.27, p < .01$. Customers who purchased wine for themselves experienced more satisfaction after shopping at the small wine store ($M = 9.10$) compared to the large wine store ($M = 8.38$), $t(40) = 2.53, p < .05$; once again this is consistent with the choice overload effect. However, a reverse choice overload effect occurred among customers who purchased wine for others. Faced with this decision, customers experienced more satisfaction after shopping at the large wine store ($M = 9.44$) compared to the small wine store ($M = 8.00$), $t(16) = 2.30, p < .05$. No main effects were significant.

These findings both replicate and extend Study 1. Post-choice satisfaction varied as a function of the number of choices in an array, and the person for whom one is choosing. Of import, this study took place outside of the laboratory, thus its major strength lies in replicating the effect in a realistic setting. However, because of this setting, there are some limitations to bear in mind. For example, it is possible that personal and proxy decision makers varied on other, unmeasured dimensions such as how much time and money they spent in each store. Moreover, personal and proxy decision makers' preferences (e.g., liking red wine but buying for someone else who likes white wine) or goals (e.g., buying an expensive or unique wine for someone else with the aim of impressing him or her) may have also varied. Finally, there may have been differences in the degree that personal and proxy decisions makers seek or use advice from others (e.g., store employees). Owing to the limitations inherent in field studies—it is not possible to research all variables that might be of interest because of both logistical and ethical constraints—potential differences such as these could not be measured, yet they may play a role in both self-other decision making and choice overload. That said, using both laboratory and field methods undoubtedly provides more convincing evidence that greater satisfaction can result after choosing among extensive choices, so long as individuals choose for others. I suggested that this is because a different regulatory focus is activated among personal and proxy decision makers. Studies 3a and 3b examine this possibility by showing whether regulatory focus mediates the relation between self-other decision making and choice overload.

CHAPTER 5

STUDIES 3A AND 3B

In this pair of studies, mediation between self-other decision making and choice overload was tested causally by manipulating both the independent variable (self-other decision making) and mediator (regulatory focus). In Study 3a, participants were asked to respond to scenarios concerning decisions they would make for themselves; alternatively, participants were asked to respond to scenarios concerning decisions they would make for others. Next, participants responded to items from the RFQ—a validated scale that measures promotion and prevention focus (cf., Higgins et al., 2001). In Study 3b, participants were induced with either a promotion or prevention focus and then asked to select among either many or few ice cream flavors. Taken together, the results of Studies 3a and 3b could indicate that self-other decision making influences people's regulatory focus, and that regulatory focus influences choice overload.

Method

Participants and Procedure. Two hundred seven undergraduates agreed to participate in exchange for extra credit. In Study 3a ($N = 117$), the effect of self-other decision making on regulatory focus was investigated, whereas in Study 3b ($N = 90$), the effect of regulatory focus on choice overload was investigated. These studies would provide a causal link between self-other decision making, regulatory focus, and choice overload.

In Study 3a, participants were given 11 scenarios from Beisswanger et al. (2003), each describing a decision about a real-life issue. Specifically, participants made decisions for a same-sex friend, or for the self. After participants responded to

the scenarios, they filled out the RFQ (cf., Higgins et al., 2001), an 11-item questionnaire that measures promotion focus and prevention focus.

In Study 3b, the mediator was manipulated. Specifically, regulatory focus was manipulated by asking participants to write a brief essay about their hopes and aspirations, or alternatively, their duties and obligations (cf., Higgins et al., 1994). In order to induce a promotion focus, participants were asked to think about how their current hopes and aspirations are different now from what they were when they were growing up, as well as what accomplishments they would ideally like to meet at this point in their life. In contrast, to induce a prevention focus, participants were asked to think about how their current duties and obligations are different now from what they were when they were growing up, as well as what responsibilities they think they ought to meet at this point in their life. After writing their essays, participants were presented with pictures of different flavors of ice cream, and asked to select a flavor that they would choose for themselves or for a friend. The number of flavors that participants could choose from varied, such that participants could choose among either 8 flavors or 35 flavors. After selecting an ice cream flavor, participants answered the same questions measuring satisfaction from Study 1 ($\alpha = .70$), in addition to three items measuring overload. Specifically, participants indicated to what extent they felt overwhelmed; confused in the decision process; and how difficult it was for them to decide which ice cream to choose (cf., Diehl & Poynor, 2007). The overload items, which were anchored from 1 (*not at all*) to 9 (*extremely*), demonstrated high reliability ($\alpha = .81$).

Results and Discussion

The primary dependent variables for Studies 3a and 3b are the reported levels of promotion and prevention among proxy and personal decision makers (Study 3a), and the levels of satisfaction and overload among promotion and prevention focused

participants (Study 3b). As predicted, proxy decision makers reported more promotion focus ($M = 22.59$) than personal decision makers ($M = 21.19$), $t(115) = 2.36, p < .05$. Moreover, personal decision makers reported more prevention focus ($M = 17.32$) than proxy decision makers ($M = 15.98$), $t(115) = 1.98, p < .05$. Thus, the results of Study 3a support the link between self-other decision making and regulatory focus—proxy decision making is related to promotion focus, whereas personal decision making is related to prevention focus. Would, however, regulatory focus predict choice overload?

Study 3b investigated this possibility. In particular, I conducted two separate 2 (regulatory focus: prevention versus promotion) X 2 (choice array: few versus many) ANOVAs; one on participants' satisfaction and another on participants' overload. Both of which revealed the predicted significant interactions, $F(1, 86) = 24.42, p < .001$ for satisfaction; $F(1, 86) = 8.51, p < .01$ for overload. In addition, a main effect of choice array evidenced for overload, $F(1, 86) = 8.82, p < .01$. Not surprisingly, participants experienced greater overload after choosing among many options ($M = 3.83$) compared to choosing among few options ($M = 2.94$). However, with respect to the interactions, prevention focused participants experienced more satisfaction and less overload after selecting among few ice cream flavors ($M_{\text{satisfaction}} = 8.44; M_{\text{overload}} = 2.55$) than among many ice cream flavors ($M_{\text{satisfaction}} = 7.53; M_{\text{overload}} = 4.33$), $t(40) = 3.07, p < .01$ for satisfaction; $t(40) = 4.10, p < .001$ for overload. And as expected, the reverse occurred among promotion focused participants; they experienced more satisfaction, yet the same amount of overload, after selecting among many ice cream flavors ($M_{\text{satisfaction}} = 8.22; M_{\text{overload}} = 3.33$) than among few ice cream flavors ($M_{\text{satisfaction}} = 7.41; M_{\text{overload}} = 3.32$), $t(46) = 4.07, p < .001$ for satisfaction; $t < .04$ for overload. Thus, the results of Study 3b support the link between regulatory focus and choice overload—prevention focus is related to experiencing choice overload, whereas

promotion focus is related to experiencing a reversal of choice overload. These findings provide evidence for the relation between self-other decision making and choice overload, and in particular, the mediating role of regulatory focus. To extend on this finding, Studies 4 and 5 were carried out to investigate potential variables that moderate this relationship.

CHAPTER 6

STUDY 4

In this study, social distance between self and other was manipulated. As the social distance between the self and others changes, so too does the level of regulatory focus. That is, a promotion focus is related to high social distance, whereas a prevention focus is related to low social distance (Mogilner et al., 2008; Pennington & Roese, 2003). In order to manipulate social distance, participants were led to include others into their concept of the self. In particular, participants were primed with either an interdependent self-construal (low social distance) or an independent self-construal (high social distance) by circling pronouns in a supplied text (e.g., Gardner et al., 1999). I expected that among participants with low social distance between self and other, decisions for others would be prevention focused (see also Lee et al., 2000); hence choice overload would be observed among both personal and proxy decision makers.

Method

Participants and Procedure. Sixty-nine undergraduates agreed to participate in exchange for extra credit. Participants were instructed to read a paragraph detailing a child's rendition of a family trip to Costa Rica, and simultaneously circle pronouns contained within the story. In half of the stories, pronouns were independent (e.g., *I, me, my*), in the other half, pronouns were interdependent (e.g., *we, us, our*). Research has shown that circling interdependent pronouns elicits inclusion of others into the concept of the self (low social distance between self and other), and likewise, circling independent pronouns prevents inclusion of others into the concept of the self (high

social distance between self and other; Gardner et al., 1999; Kuhnen & Oyserman, 2002).

After circling pronouns, participants were given materials with paint swatches and asked to select one. Both the number of paint swatches differed (8 versus 35) and for whom participants were deciding (self versus other), such that, as in Study 1, participants selected among either many or few options, for either themselves or somebody else.

Measures. Participants completed three items measuring satisfaction ($\alpha = .71$): “How satisfied are you with the paint color you picked?”, “How much do you regret choosing the color you selected?”, and “How satisfied do you think you would be if you actually painted your room the color you selected?”. Each item was rated on a scale from 1 (*not at all*) to 9 (*extremely*), and the second item was reverse scored.

Following these questions, participants responded to questions designed to measure regulatory focus created by van Stekelenburg (2006). From 1 (*not at all*) to 7 (*very much*), participants responded with their level of agreement to 14 proverbs—half of which are promotion focused (e.g., “Where there’s a will, there’s a way”; $\alpha = .79$) and half of which are prevention focused (e.g., “Act normal, that’s crazy enough”; $\alpha = .65$). High agreement among promotion focused proverbs indicates one is in a promotion focus, whereas high agreement among prevention focused proverbs indicates one is in a prevention focus. Finally, all participants completed a check on their social distance by writing twenty statements about themselves. In the same manner as Cousins (1989), participants completed the sentence, “I am...” twenty different times, and the number of interdependent statements (e.g., “I am a sister”) plus independent statements (e.g., “I am extroverted”) was counted.

Results and Discussion

Results indicate that the manipulation of social distance was successful. Two coders blind to the experimental conditions and hypotheses coded each statement according to Cousins' (1989) recommendations. The coders demonstrated significant agreement in their ratings of the statements ($r = .92, p < .01$), thus their assessments were averaged together to form one score for social distance. In particular, participants primed with low social distance between self and other generated proportionally more statements related to interdependence ($M = .20$) than participants primed with high social distance between self and other ($M = .12$), $t(66) = 2.79, p < .01$.

Satisfaction. A 2 (decision maker role: personal versus proxy) X 2 (choice array: few versus many) X 2 (social distance: low versus high) ANOVA on satisfaction yielded a marginal three-way interaction, $F(1, 60) = 2.75, p = .10$. To analyze the interaction, separate analyses were performed for low and high social distance participants. A 2 (decision maker role: personal versus proxy) X 2 (choice array: few versus many) ANOVA among high social distance participants revealed a significant interaction, $F(1, 36) = 6.91, p < .05$, indicating high social distance participants who chose for themselves reported more satisfaction after choosing among few options ($M = 6.73$) compared to many ($M = 5.92$), $t(21) = 2.03, p = .05$. Yet, among participants who chose for others, the reverse was observed; high social distance participants reported more satisfaction after choosing among many options ($M = 6.80$) compared to few ($M = 5.95$), $t(15) = 1.98, p < .05$. Thus, among high social distance participants, the predicted pattern of the choice overload effect and reverse choice overload effect was observed.

I predicted that because low social distance individuals incorporate others into their concept of the self (Triandis, 2001), they would evidence a prevention focus (Lee et al., 2000) and choose for others as they would choose for themselves. If so, then we

would expect low social distance individuals to experience choice overload in choices for both others and themselves. In other words, instead of an interaction, we would expect a main effect of choice array. A 2 (decision maker role: personal versus proxy) X 2 (choice array: few versus many) ANOVA among low social distance participants revealed a significant main effect of choice array, $F(1, 24) = 5.60, p < .05$. The interaction was not significant, $F < 1$. Regardless of whether a decision was for the self or somebody else, low social distance participants experienced more satisfaction after choosing among few choices ($M = 6.78$) compared to many ($M = 6.00$).

Regulatory Focus. I predicted that personal decision makers are in a prevention focus, and that proxy decision makers are in a promotion focus. To test the first prediction, a 2 (decision maker role: personal versus proxy) X 2 (choice array: few versus many) X 2 (social distance: low versus high) ANOVA on prevention was conducted and revealed a main effect of social distance, $F(1, 60) = 7.29, p < .01$, as we would expect given past research showing that low social distance (i.e., interdependent) individuals heed prevention related information more than promotion related information (Lee et al., 2000). Indeed, low social distance participants endorsed prevention focused proverbs more ($M = 4.58$) than high social distance participants ($M = 3.88$). Of particular interest here is the main effect of decision maker role, $F(1, 60) = 5.47, p < .05$. Personal decision makers endorsed prevention related proverbs more ($M = 4.92$) than proxy decision makers ($M = 3.96$). Although the interaction between decision maker role and social distance was not significant $F < 2.5$, a simple effects test revealed that among personal decision makers, greater endorsement of prevention related proverbs was observed among low social distance participants ($M = 5.01$) than among high social distance participants ($M = 3.98$), $t(36) = 3.45, p < .001$.

To test the second prediction—that proxy decision makers are in a promotion focus—a 2 (decision maker role: personal versus proxy) X 2 (choice array: few versus many) X 2 (social distance: low versus high) ANOVA on promotion was conducted and revealed a main effect of decision maker role, $F(1, 60) = 4.65, p < .05$. As predicted, proxy decision makers endorsed promotion related proverbs more ($M = 5.47$) than personal decision makers ($M = 4.27$).

This study extends the previous studies in several ways. First, evidence for the choice overload effect was found, but so was additional evidence for a reverse choice overload effect. Personal decision makers were less satisfied after choosing among many options compared to few, however, proxy decision makers were more satisfied after choosing among many options compared to few. In addition, the effect of social distance was found to moderate whether people experience choice overload. Primed with low social distance, participants felt overloaded by extensive options in both decisions for themselves and others—presumably because these participants felt psychologically close to others and included others into their concept of the self. Consequently, low social distance participants were in a prevention focus and made decisions for others as they would make decisions for themselves. In contrast, participants primed with high social distance between self and other only experienced choice overload in decisions for themselves, and likewise, experienced reverse choice overload in decisions for others. In light of these findings, personal decision makers were found to be in a prevention focus, whereas proxy decision makers were found to be in a promotion focus.

CHAPTER 7

STUDY 5

Study 5 continues this research by investigating the effect of accountability on self-other decision making and choice overload. Tetlock and colleagues (1983; 1985; Tetlock, Lerner, Boettger, 1996) suggested that when individuals are held accountable they simultaneously behave vigilantly; and vigilance is a sign of a prevention focus (Crowe & Higgins, 1997). Thus when decision makers are held accountable and have to consequently justify their decisions to others, attention to negative outcomes may take precedence over attention to positive outcomes regardless of whether decisions are for others.

In testing this possibility, Study 5 comprised of students selecting courses for a following semester. As in the preceding studies, the array of choices and decision maker role varied, such that students selected among either a small or large array of courses for either themselves or somebody else. In addition, accountability was manipulated by informing half of the students that they would have to justify their choices to the professor of their class; the other half of students were instructed to justify their choices, but to no one in particular. Afterward, all participants completed the same check on regulatory focus used in Study 4, and answered questions dealing with the subsequent satisfaction with their class choices.

Method

Participants and Procedure. One hundred and eighty-one undergraduates agreed to participate in exchange for extra credit. Participants were instructed that they would be taking part in a study on selecting courses for the following semester. In particular, courses were drawn from an array of business-related offerings from

participants' university course roster. Before participants selected courses, they were presented with a disclaimer that elicited one of two levels of accountability. For half of the participants, the disclaimer revealed that participants would be instructed to later justify their choices and that their professor (all participants were drawn from the same class) would read each participant's justifications. For the other half of participants, the disclaimer was the same, barring the part of participants' professor reading each participant's justifications. Thus, in both conditions participants justified their choices, but in only one condition did participants think their professor would read their justifications. After reading the disclaimer, participants made their course selections. As in the previous studies, participants selected for either themselves or somebody else; moreover, participants selected among either many (60) or few (16) courses. In a departure from the previous studies, participants selected two options. After making their selections, participants justified their choices and then responded to the same satisfaction questions ($\alpha = .73$) and regulatory focus measures ($\alpha = .79$ for promotion focus; $\alpha = .70$ for prevention focus) used in Study 4, as well as a manipulation check on accountability ("How concerned are you that your choices will be evaluated by others?"). Participants responded from 1 (*not at all*) to 9 (*extremely*).

Results

Results indicate that the manipulation of accountability was successful. Among participants who were instructed that the professor would read their justifications, concern that their choices would be evaluated by others was greater ($M = 4.43$) than among participants who were not instructed that the professor would read their justifications ($M = 2.29$), $t(174) = 6.28, p < .001$.

Satisfaction. A 2 (decision maker role: personal versus proxy) X 2 (choice array: few versus many) X 2 (condition: accountable versus non-accountable) ANOVA on satisfaction yielded a significant main effect of choice array, $F(1, 166) =$

7.30, $p < .01$, indicating that participants who chose among few options experienced more satisfaction ($M = 7.08$) than participants who chose among many options ($M = 6.58$). However, this effect was qualified by two interactions. The first interaction demonstrated accountability moderates the effect of choice array on satisfaction, $F(1, 166) = 5.13, p < .05$, such that among accountable participants, satisfaction was lower after choosing among many ($M = 6.34$) compared to few options ($M = 7.27$), $t(88) = 3.63, p < .001$; among non-accountable participants, however, no difference was observed, $t < 1$. The second interaction, and the one of particular interest here, is the significant three-way interaction, $F(1, 166) = 4.65, p < .05$. To analyze it, separate analyses were performed for accountable and non-accountable participants. A 2 (decision maker role: personal versus proxy) X 2 (choice array: few versus many) ANOVA among non-accountable participants revealed a significant interaction, $F(1, 80) = 6.89, p < .05$, indicating that non-accountable participants who chose for themselves reported more satisfaction after choosing among few options ($M = 7.14$) compared to many ($M = 6.35$), $t(79) = 2.91, p < .01$. Yet, among participants who chose for others, the reverse was observed; non-accountable participants reported more satisfaction after choosing among many options ($M = 7.23$) compared to few ($M = 6.61$), $t(82) = 2.44, p < .05$. Thus, among non-accountable participants, the predicted pattern of the choice overload effect was observed, yet in choices for others, participants experienced a reverse choice overload effect.

I predicted that because accountable participants behave with a sense of prevention focus (Crowe & Higgins, 1997), they would choose for others as they would choose for themselves. If so, then we would expect accountable participants to experience choice overload in choices for both others and themselves. In other words, instead of an interaction, we would expect a main effect of choice array. A 2 (decision maker role: personal versus proxy) X 2 (choice array: few versus many) ANOVA

among accountable participants revealed a significant main effect of choice array, $F(1, 86) = 12.67, p < .01$. Moreover, the interaction was not significant, $F < 1$. Thus, it would appear that for accountable participants, choices for the self resembled choices for others. Regardless of whether a decision was for the self or somebody else, participants experienced more satisfaction after choosing among few choices ($M = 7.29$) compared to many ($M = 6.36$).

Regulatory Focus. I predicted that proxy decision makers are in a promotion focus, and that personal decision makers are in a prevention focus. To test this hypothesis, a 2 (decision maker role: personal versus proxy) X 2 (choice array: few versus many) X 2 (condition: accountable versus non-accountable) ANOVA on promotion was conducted and revealed a main effect of decision maker role, $F(1, 166) = 4.42, p < .05$. As predicted, proxy decision makers endorsed promotion related proverbs more ($M = 5.88$) than personal decision makers ($M = 4.60$).

To test whether personal decision makers are in a prevention focus, a 2 (decision maker role: personal versus proxy) X 2 (choice array: few versus many) X 2 (condition: accountable versus non-accountable) ANOVA on prevention was conducted. There was a main effect of decision maker role, $F(1, 166) = 7.60, p < .01$, as well as a main effect of accountability condition, $F(1, 166) = 4.05, p < .05$. Specifically, personal decision makers endorsed prevention related proverbs more ($M = 5.39$) than proxy decision makers ($M = 3.97$); moreover, consistent with research linking accountability and prevention focus (Crowe & Higgins, 1997), accountable participants endorsed prevention related proverbs more ($M = 5.30$) than non-accountable participants ($M = 4.06$).

The findings from this study provide converging evidence that the effects of choice overload are reversed among proxy decision makers, and suggest that these effects are moderated by felt accountability. Among personal decision makers, greater

satisfaction was experienced in choices with few options compared to choices with many options—in other words, the choice overload effect was observed. However, the reverse was observed among proxy decision makers. In this case, greater satisfaction was experienced in choices with many options compared to choices with few options. That said, among people who were accountable for their choices, the reverse choice overload effect was absent. Instead, in both choices for the self and others, choice overload was present. Why? It was suggested that self-other decision making varies with regulatory focus. As predicted, among personal decision makers, a prevention focus was evidenced, and among proxy decision makers, a promotion focus was evidenced. However, among proxy decisions who were induced to feel accountability, a prevention focus was evidenced and their choices were thus similar to the choices that people make for themselves.

As a secondary contribution, Study 5 continues the research on choice overload by examining a context in which people make more than one decision. Research on choice overload typically comprises instructions to select and make one single decision. But decisions in real life may not be as simple. For example, in thinking about what to make for dinner, an individual may make several decisions, such as deciding which ingredients to use and which entrée to make, that altogether culminate into one ultimate decision. As in the current study, students selected more than one course that would form their overall course load. In this vein, the current study demonstrates that the choice overload effect—as well as the reverse choice overload effect—operates in contexts in which people make multiple decisions. Evidently, the opportunity to secure more alternatives does not eliminate the choice overload effect.

CHAPTER 8

STUDY 6

In spite of the clear findings presented so far, the effect of making a decision for someone else on reversing the choice overload effect seems remarkable enough to beg additional verification. In this vein, a mini meta-analysis was carried out. The present studies provide good conditions for statistical replication. For example, the participant populations included both college students and non-college students. In addition, the data for each study were collected across three years at different points in time. What is more, the array of choices ranged from hypothetical to real, and included consumer products such as ice cream, wine, and paint swatches, in addition to educational choices such as classes. Further, these choices ranged in their ease with which they can be categorized, from relatively easy (e.g., wines can be categorized by country) to relatively difficult (e.g., ice cream can be categorized by, perhaps, caloric content). Finally, the primary dependent variable, satisfaction, comprised of different items across studies. To be sure, each study taken alone provides a good view of the total pattern of results, however, a test of how well the hypothesis fares writ large requires looking across studies.

In this regard, I present the results of a mini meta-analysis of Studies 1, 2, 4, and 5 (Studies 3a and 3b are excluded on account of them being composed of two parts; that is, the effect of self-other decision making on choice overload is not directly tested). The results from each study are displayed in Table 1. I first obtained the z value associated with the probability of the null hypothesis, that is, the traditional p value. The combined probability was obtained using the method suggested by Rosenthal (1984) and is simply the sum of the z s divided by the square root of the

number of studies entered into the computation. Note that in Study 4, I report the results for high and low social distance separately; likewise, in Study 5, I do the same for accountable and non-accountable participants. Thus, these were considered separate samples for purposes of the meta-analysis.

TABLE 1
Meta-Analysis

Study	Choice Overload		Reverse Choice Overload	
	<i>z</i>	<i>p</i>	<i>z</i>	<i>p</i>
<i>Study 1</i>	2.17	0.0300	2.12	0.0340
<i>Study 2</i>	2.42	0.0155	2.11	0.0349
<i>Study 4</i>				
High social distance participants	1.92	0.0549	1.84	0.0658
Low social distance participants	2.22	0.0264	NA	NA
<i>Study 5</i>				
Non-accountable participants	2.83	0.0047	2.39	0.0168
Accountable participants	3.43	0.0006	NA	NA
<i>Combined statistics</i>	6.12	0.0000	4.12	0.0000

I hypothesized that choice overload reverses among people who make decisions for others, and preserves among people who make decisions for themselves. As Table 1 shows, we can be quite certain that choice overload occurs among people who make their own decisions ($p < .001$). Moreover, there is clear evidence that the reverse occurs among people who make decisions for others ($p < .001$). Overall, then, there appears to be strong, reliable support for the relation between self-other decision making and choice overload.

CHAPTER 9

GENERAL DISCUSSION

The current series of experiments address whether a reverse choice overload effect is observed in decisions for others, and whether regulatory focus mediates this relationship. In five of the experiments, plus a mini meta-analysis, both a choice overload and reverse choice overload effect was evidenced. Contrary to the findings of Iyengar and Lepper (2000), the present research demonstrates a clear example of when more choice satisfies in comparison to less choice. As long as participants chose for others, decisions comprising more paint swatches (Study 1 and 4), more wine (Study 2), more flavors of ice cream (Study 3), and more school courses (Study 5) were more satisfying and less regrettable than decisions comprising fewer of these choices. Owing to the fact that a decision for somebody else activates a promotion focus and hence a motivation to reduce errors of omission, individuals experienced greater satisfaction after choosing among many options. Likewise, because a decision for the self activates a prevention focus and hence a motivation to reduce errors of commission, individuals experienced less satisfaction after choosing among many options.

Along these lines, in making decisions for others, participants who were primed with low social distance (Study 4) or led to believe that they were accountable for their choices (Study 5) did not show the reverse choice overload effect. Instead, under conditions of low social distance and accountability, a prevention focus was activated, resulting in individuals' decisions for others to resemble individuals' decisions for themselves. These findings are consistent with other research. Lee et al. (2000) found that low social distance was related to a prevention focus; as did Crowe

and Higgins (1997) with respect to accountability. Moreover, in a medical study, Zikmund-Fisher et al. (2006) found that proxy decision makers committed fewer errors of omission (e.g., not giving a vaccine) compared to personal decision makers. Together, this evidence provides a strong case that among proxy decision makers, a motivation to reduce errors of omission is present, likewise, among personal decision makers, a motivation to reduce errors of commission is present.

The theoretical implications of the present work reach beyond the context of choice overload. Fundamentally, this research sheds light on the differences between making a decision for the self and making a decision on behalf of somebody else. A handful of earlier studies have investigated choice overload, regulatory focus, and self-other decision making, and the current work makes contributions to these lines of research in three different ways. First, although choice overload is explained by demotivation (Iyengar & Lepper, 2000), this explanation may be limited to decisions that are for the self. Indeed, the current work demonstrates that choice overload is context dependent, such that in cases like making decisions for others, choosing among many alternatives is not in itself demotivating, and by the same token, not unsatisfying. In particular, other mechanisms may be used to explain choice overload, as in the present case with regulatory focus. This perspective is not meant to invalidate or replace explanations based on demotivation. Instead, it is meant to complement these accounts by showing choice overload can be produced according to individuals' regulatory focus.

Second, the current work reconciles mixed findings surrounding research on self-other decision making. Research to date has examined whether proxy decision makers make more or less risky decisions compared to personal decision makers (e.g., Beisswanger et al., 2003; Fernandez-Duque & Wifall, 2007; Stone et al., 2002; Wray & Stone, 2005). Although this research is inconclusive insofar as decisions for others

have been found to be both more risky and less risky than decisions made for the self, an appeal to regulatory focus informs that it might not be a case of whether decisions for others compared to decisions for the self differ according to level of risk, but rather, according to a selective focus on positive and negative information. For example, when making a decision for the self, and a prevention focus is activated, a *cautious* decision (e.g., declining a blind date) might result when an individual anticipates the *presence* of a negative outcome (e.g., going on a blind date with a boring partner) whereas a *risky* decision (e.g., continuing to gamble after incurring a loss) might result when an individual anticipates the *absence* of a negative outcome (e.g., mollifying a loss). Thus, applying regulatory focus to self-other decision making is of particular importance because it reconciles past research into a unifying theory.

Third, an investigation of self-other decision making is interesting in its own right. There have been few attempts to study how decision making is different when a decision is for the self compared to when it is for somebody else, thus the research offers potential new findings in literatures of behavioral decision making, social psychology, marketing, and organizational behavior. Indeed, the results presented here lead to speculations about other studies that in some way or another deal with self-other decision making. The following discussion provides some examples.

Self-Other Perception. Self-perception is based on individuals' internal states, whereas other-perception is based on individuals' overt behaviors (Prentice, 1990). Moreover, Symons and Johnson (1997) concluded in a meta-analysis that self-perception is more elaborate than other-perception because individuals rely on their memories to form self-perceptions. To the degree that individuals rely on their memories, decisions will be different (Weber & Johnson, 2006). Considering this, we might suspect that decisions for the self and others vary according to whether they are, in the parlance of Lynch and Srull (1982), memory-based or stimulus-based. In the

former, preferences are retrieved from memory (e.g., grocery shopping without a list); in the latter, preferences are externally specified (e.g., grocery shopping with a list). This difference is important because individuals form different preferences and hence make different decisions under conditions of memory-based and stimulus-based choices (Rottenstreich, Sood, & Brenner, 2007). Of relevance is that individuals cannot access others' memories (or any other internal states); accordingly, decisions for others may be based on others' observable and presented behaviors—which could be thought of as external stimuli. In making decisions for others then, individuals might surmise others' preferences by forming inferences of their overt behaviors—as work on the fundamental attribution error suggests (for a review, see Gilbert & Malone, 1995). In this manner, we can consider decisions for others as constrained by the stimuli presented to us (i.e., limited to observable behaviors) and decisions for the self as enriched by internal states such as prior knowledge stored in memory and mood, that only the self can access. Indeed, people tend to think of others' behaviors as less labile compared to their own behaviors (Baxter & Goldberg, 1987) and think of themselves as having more opposing traits (e.g., serious and carefree) than others (Sande, Goethals, & Radloff, 1988). Work by Kahneman and Tversky (1979) provides a similar explanation, in that predictions for others tend to be based on an “external approach”, that is to say, how others have behaved in the past (i.e., base rates) whereas predictions for the self tend to be based on an “internal approach” that favors personal and self-possessed information (e.g., Buehler, Griffin, & Ross, 1994; Epley & Dunning, 2000).

Cognitive Dissonance. In the regret literature, research is unequivocal concerning the degree of regret people experience in actions they have taken relative to actions they have not (i.e., inactions). Stemming from a classic scenario by Kahneman and Tversky (1982) describing two investors, one who sells shares and

discovers later he would have been better off by \$1200 if he had not sold (action condition), and another who considers against selling shares and discovers later he would have been better off by \$1200 if he had sold (inaction condition), research has shown that people confer greater regret to the former individual—the one who takes action by selling shares—than to the latter individual—the one who does nothing (Baron & Ritov, 1994); of course, this is despite both investors are equally worse off. With respect to cognitive dissonance, Gilovich, Medvec, and Chen (1995) showed in the Monty Hall problem that action (e.g., deciding to switch prizes) elicits greater cognitive dissonance than inaction (e.g., deciding not to switch prizes). Applied to the present case, Kray and Gonzalez (1999) found more action in decisions for the self than among decisions for others; specifically, students were more likely to switch majors for themselves than they were willing to advise for others. Being that action, such as switching majors, evidences more in decisions for the self, and elicits greater cognitive dissonance, it is plausible that personal decision makers experience more cognitive dissonance than proxy decision makers. In fact, one study has found that cognitive dissonance is greater among personal decision makers. Hoshino-Browne et al. (2005) reported that among European Canadians, more dissonance reduction was observed in choices for the self than in choices for others. However, the authors also report an interaction, such that among Japanese Canadians, more dissonance reduction was observed in choices for others than in choices for the self.

Systematic and Heuristic Processing. Levin, Schnittjer, and Thee (1988) reported that in scenarios about the self, framing effects disappear, whereas in scenarios about others, framing effects are present—presumably because in scenarios that involve the self, situations are personally involving and cause individuals to consider all sides of an issue. In line with thinking of decisions for the self as incorporating more personal involvement, is the idea that decisions for the self are

characterized by systematic thinking whereas decisions for others are characterized by heuristic thinking. Chaiken (1980) showed that in decisions that are personally involving, individuals process arguments systematically; what is more, work by Petty, Cacioppo, and Goldman (1981) evidenced the complementary finding, that low personal involvement is positively related to attention to peripheral cues, in other words, heuristic thinking. Considering individuals have more knowledge of themselves than they have of others (Kruger, Windschitl, Burrus, Fessel, & Chambers, 2008), and that individuals with relatively low stores of knowledge revert to heuristic thinking (Wood, Rhodes, & Biek, 1995), it is plausible that decisions for others are made heuristically whereas decisions for the self are made systematically.

Empathy. In looking at levels of empathy among proxy decision makers, a lack of empathy may lead people to make decisions that are inappropriate or worse, suboptimal. If decision makers lack empathy, they might make decisions for others based on what they themselves would decide, or alternatively, succumb to heuristics like the fundamental attribution error and make decisions for others based on others' overt behaviors, instead of attempting to perceive others' internal states and base decisions on others' affect and cognition. Even if decision makers demonstrate empathy, different decisions could result considering decision makers can adopt different styles of empathy. For example, Batson, Early, and Salvarani (1997) report on two different ways to empathize with someone, one by imagining how the other feels, and another by imagining how one would feel if they were the other. Although both forms of empathy are similar, the latter form elicits personal distress, which activates a self-oriented motivation aimed at eliminating distress (Batson, Fultz, & Schoenrade, 1987). Decisions are different when they are made under stress compared to when they are not (e.g., Janis, 1982). In like manner, decisions are different according to whether they are made in "hot" or "cold" states (Loewenstein, 1999), in

other words, with or without emotions (e.g., anger), drives (e.g., hunger), or motivations (e.g., pain). Research has shown that people are unable to accurately predict what they will want in the future because their affective states will potentially be different in the future (Loewenstein & Schkade, 1997), but more to the point, people are also unable to predict what others will want in the future—this is called an *empathy gap*. As an example, Loewenstein (2005) asserted that a patient may be in a hot state after receiving bad news despite a doctor’s pain-free cold state, a difference that could cause the doctor to underappreciate the patient’s pain and ultimately cause the doctor to undermedicate the patient.

Creativity. Although much research has investigated creative problem solving, the research has focused on generating ideas or solutions that are for the self—and has not yet explored how generating ideas or solutions for others influences people’s creativity. Based on research on construal level theory, it is possible that people are more creative on others’ behalves, and consequently generate more creative ideas and solve more insight problems than people who carry out these creative activities for themselves. Indeed, in making decisions for others, the level of construal is higher than in making decisions for the self (Lieberman et al., 2007). Given that individuals’ cognition becomes more creative when they are induced into high-level mental representations (Förster, Friedman, & Liberman, 2004; Jia, Hirt, & Karpen, 2009), it is plausible that individuals who solve creative problems on behalf of others are more creative than individuals who solve creative problems for themselves.

Power. Also potentially worthwhile is considering the role of power among personal and proxy decision makers. In particular, do people experience feelings of power when they make decisions for other people? This is an interesting question because people have a tendency to eschew empathy when they feel powerful (Galinsky, Magee, Inesi, & Gruenfeld, 2006)—a potential problem among proxy

decision makers, being that they may fail to adequately empathize with those for whom they are making decisions. What is more, power also causes people to make riskier and more aggressive decisions, as well selective focusing and inattention to peripheral cues (Anderson & Galinsky, 2006; Fast & Chen, 2009; Guinote, 2007). If proxy decision makers do feel as though they have power, we might suspect that their decisions for others resemble, in a non-trivial, the effects of power on decisions. Future research will therefore benefit from extending investigations of power into a self-other decision making context.

Limitations

Although the research is ripe for investigating self-other decision making, there are limitations to keep in mind. For example, personal decision makers get to experience the outcomes of their choices, however, proxy decision makers may rarely get to experience the outcomes. This difference is important because commensurate with getting to experience an outcome is anticipating the nature of the outcome; put differently, if an individual chooses for herself, she will potentially consider the extent she anticipates regretting her choice before ultimately choosing (Zeelenberg, 1999). But if an individual is choosing for somebody else, she may not anticipate regret and therefore preclude it from influencing her decision. That said, participants in Studies 1, 3, 4, and 5 did not actually experience their choices, suggesting self-other differences in decision making remain even after controlling for the influence of anticipating outcomes. Nevertheless, future research should directly examine the effect of experiencing an outcome in self-other decision making.

A second limitation of the current research is that it is impossible to know for whom individuals were choosing. On research in social judgment, Epley and Dunning (2000) suggested that individuals make different predictions for strangers or “averages persons” than they do for family members or friends (see also Hsee & Weber, 1997).

The same could be said with making decisions, such that decisions may vary according to whether the other is a close or distant other. This notion dovetails with Study 4, being that the social distance between the self and other was directly manipulated, and different effects on choice overload were observed. Moreover, participants in Study 2 who chose among wines in a store presumably knew for whom they were choosing, yet still experienced reverse choice overload. Likewise, the same results were found in Study 3a, in which participants were instructed to choose for friends. Thus, we might expect differences in self-other decision making according to whom people are choosing (e.g., mother, friend, employee). Future research should directly investigate specific degrees of social distance such as choosing for subordinates or superordinates, among possible other cases such as choosing on behalf of a group.

Another limitation of the current research is the focus on post-choice satisfaction. Although investigating satisfaction is crucial to measuring choice overload, the current research ignores whether decisions for the self and others are different in areas beyond post-choice satisfaction and regulatory focus. I found that choices for others and choices for the self are psychologically different, but are they logically different? Considering a different regulatory focus is elicited and—depending on the array of choices—different post-choice satisfaction is experienced, we can suspect that the objective nature of decisions is also different between personal and proxy decisions. Still, future research is necessary to confirm this assertion and examine in what particular ways decisions for the self are different from decisions for others.

Implications

Understanding the differences in self-other decision making is not only valuable for researchers in organizational behavior, social psychology and decision

making, but should also prove of considerable interest to managers, negotiators, product designers, marketers, and advertisers, among many others. In the motivation literature for example, managers can be divided into two groups based on how they perceive their employees—as lazy and unmotivated, or as empowered and responsible (McGregor, 1960). It is easy to imagine managers in one group making different decisions for subordinates compared to managers in the other group. In fact, Simon (1979) writes that organizations are shaped by the decisions that managers make, and to the extent that decisions for others reflect a tendency that employees are empowered and responsible, we can expect organizations to be decentralized and have high levels of participative management and job enlargement; whereas if decisions for others reflect a tendency that employees are lazy and unmotivated, we can expect organizations to be centralized and have low levels of autonomy. Thus, the way in which people make decisions for others may influence outcomes at the organizational level.

Another implication of the current work deals with personality, specifically whether proxy decision makers show empathy. Kray and Gonzalez (1999) suggested that there may be an individual difference in ‘placing oneself in another’s shoes’; if so, organizations could assess which employees are best suited to make decisions for others, and likewise, which employees are best suited to make decisions for themselves. Among people who make decisions for others, organizations should desire empathetic employees, for example people who score high on perspective taking and empathic concern. High scores on these scales indicate healthy social functioning, such as feeling sympathetic and warm toward others, plus the ability to anticipate others’ behaviors and reactions (Davis, 1983). Considering decisions for others necessitate conferring an outcome onto others, it is morally important that decision makers make good decisions, but it is also important for people whom decisions are

made (i.e., decision takers) to be satisfied with others' decisions, being that an unsatisfying decision could undermine its quality despite how good it is. In this vein, we might want to consider not just decision makers' personalities but also decision takers' reactions, since ultimately they are the ones who bear the personal consequences of decisions (e.g., See, 2009). In the same way leadership research looks at both leaders and followers (i.e., followership) decision making research could look at situations and dispositions that enable people to make decisions for others and, dutifully take decisions from others.

A third implication of the present findings is in the domain of empathy gaps. Loewenstein (2005) recommended that people wait before making decisions with irrevocable consequences. The same could be said for people who make decisions for others. By taking extra time to deliberate, decision makers may empathize with their targets, but they may also converge on their targets' hot and cold states as well, minimizing the gap between their states and their targets' states. Still, this may be easier said than done, insofar as discerning others' states is complex; one has to intuit the other's state when the other finds out about the decision, but also important, the other's state when the decision is ultimately executed, all while accounting for one's own state. In spite of this, understanding others have different states will hopefully help in closing the gaps and produce good decisions for others.

Conclusion

In short, among personal decision makers, a prevention focus is activated and people are more satisfied with their decisions after choosing among few options compared to many options; in other words, individuals experience the choice overload effect. A different picture emerges among proxy decision makers. In this case, a promotion focus is activated and people are more satisfied with their decisions after

choosing among many options compared to few options; that is to say, individuals experience the reverse choice overload effect.

Coda

Given the ubiquity of decisions that are made on behalf of others, it is surprising how little research has been conducted on self-other decision making in psychology, marketing, and the management literature writ large. Relatively little is known about how people make decisions for other people, yet much is known about decision making in general. This was a natural place to begin, for without some basic understanding of decision making, one stands little chance of understanding the complex case of how people make decisions for other people. Work in this area can cast research in decision making in a whole new light. It could mean some of the decision heuristics and biases we take for granted are nonexistent or even reversed when a decision is made on behalf of another—such as in the present case for the choice overload effect. In the Bible, Luke teaches, “Do to others as you would have them do to you” (6:31). In retrospect, this lesson might be especially difficult to heed considering decisions we make for others are different from decisions we make for ourselves.

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