

LICENSING AND FLUENCY OF SACROSANCT EXPERIENCE RECALL

By

DAVID RASKA

A dissertation submitted in partial fulfillment of
the requirement for the degree of

DOCTOR OF PHILOSOPHY

WASHINGTON STATE UNIVERSITY
College of Business

MAY 2009

To the Faculty of Washington State University:

The members of the Committee appointed to examine the dissertation of DAVID RASKA find it satisfactory and recommend that it be accepted.

David E. Sprott, Ph.D., Chair

Eric S. Spangenberg, Ph.D.

Jeff Joireman, Ph.D.

Darrel D. Muehling, Ph.D.

ACKNOWLEDGMENTS

There is a countless number of people without whom this dissertation would not be completed or even exist. Five years ago, my mentor and friend, Dr. David Berkowitz, introduced me to his friends, Dr. David Sprott and Dr. Eric Spangenberg from Washington State University, at a marketing conference in Prague, Czech Republic. Less than a year later, my wife and I quit our jobs, sold our apartment, cashed out our bank accounts, and moved some 6,000 miles away from our families to find ourselves stranded in a small one bedroom apartment in Pullman, Washington. Some may say it was a risky decision to leave the comfort of one's home and trade it for a ticket into the unknown, particularly for someone who knew nothing about what a doctoral program was really about. No doubt it was risky, but I knew that I would have Marcela (my wife), David Sprott (chair of my dissertation committee), and Eric Spangenberg (member of my dissertation committee) on my side the moment I would lay my foot into a Ph.D. program at Washington State University. That made any risky decision look like a sure win. I am immeasurably thankful to all three of them for being there for me from the very beginning. They all have cared about me as a person and that is what has helped me throughout this dissertation process as much as their intellectual and spiritual guidance. I am grateful for having such an incredibly supportive wife, without whom none of this would ever have happened, and for having two cheering and comforting committee members whom I consider my friends. This dissertation is as much theirs as mine.

Yet another person who has left one of the deepest intellectual footprints on my dissertation is Dr. Jeff Joireman, my third member of my dissertation committee. Indeed, there is little

doubt that my dissertation would be what it is without Jeff's contribution. After all, he was the one who brought the idea of fluency to my mind at times when I was desperately seeking the lens through which I could explore how people earn their right to indulge. I will never forget his words: "At least I'm not driving a Hummer." Though meaningless to an uninvolved reader, these words triggered the idea of what may happen when something comes easy to a mind. I am truly grateful for Jeff's contributions throughout my dissertation and hope we will continue our quest for better understanding of how fluency affects not only how much Nutella I can justify to eat, but also how much water I can waste by enjoying a long soothing hot shower.

A few other special individuals I would like to thank. First, I would like to thank Dr. Darrel Muehling, our marketing department chair and my last committee member, who has always been very supportive throughout my stay at Washington State University, making it possible to enjoy such strenuous endeavors such as a Ph.D. program—always encouraging and always there. Next, it would be difficult not to mention Dr. Yany Grègoire. His bright mind, enthusiasm, appealing positioning ideas, and French-like mentality have all helped me to gain a different perspective on how I view and position my research problems. I am truly grateful that our marketing department has a scholar such as Yany. Finally, there is Chris Talbott, our departmental assistant and an invaluable asset to our department. Besides being tuned on the same radio wavelength when it comes to simple and healthy living, she has always been there, waiting with a smile and open arms to help. To me, she will remain stored in my memory as my Ph.D. mum.

Also, I would like to thank my Ph.D. colleagues that are nonetheless important components of any doctoral program experience. First, there is my office mate and friend, Berna Devezer. Berna has managed to challenge the way I thought about research problems and has left an

undeniably positive mark on how I have evolved as a scholar as well as a human being. Furthermore, I wish to thank Pingsheng Tong, my former Ph.D. colleague and current assistant professor at California State University in Sacramento. On countless occasions, Ping has brought a lot of light into my life at times I could not find my flashlight or I simply ran out of batteries. Despite the physical distance that unavoidably is growing between us, my hope is that we will continue having our discussions about life and everything else that comes with it over a glass of wine and a plate of Chinese dumplings. Finally, I want to thank to another former Ph.D. colleague, Sanjay Sisodiya, an assistant professor at the University of Idaho. Sanjay has always been willing to talk about things no one else wanted to talk about. The relaxing dinner talks with Sanjay and his family have always added fresh nutritional value to my scholarly development, bringing a pleasant change to my life.

Though the list of people who had a positive influence on me and deserve acknowledgement could continue for many more pages, I will limit the rest of my thanks to a few other very special individuals. It is impossible to imagine anything I have ever accomplished without my family. I want to thank my mum, Hana Raskova, for her motherly support from the moment I was born. Though the distance between us does not make it easy, she has managed to support me in ways I may never be able to capture by words. Similar thoughts go to my dad, Dag Raska, without whom none of this would have happened. His encouragement and support are unprecedented and much appreciated. He was there from the very beginning, freeing my mind of the doubts clouding my mind. Of course, thanks go to my older brother, Dag, who has helped me to see things through the eyes of others. And now there is my cheerful mother-in-law, Marcela

Malkova. Her endless joy to support Marcela and me in whatever we set our feet in is truly appreciated. Her homemade pickles kept me going when I needed it most.

Unfortunately, there are also a few individuals I would like to thank who have passed away while I was working on my dissertation. My late grandmothers Jaroslava Tonarova and Aranka Raskova and my friend Norinka Richter. They all have been an important part of my life and a great source of inspiration. Their fight in their own lives has been a bottomless source of strength and humble self-realization of how meaningless my own problems are in the grand scheme of things called life. They are the ones who made me persevere. They are the ones who deserve one of the greatest thanks.

My final thanks goes to Dr. Uzma Khan and Dr. Ravi Dhar for their willingness to share the materials they used in their own work on licensing in consumer decision making.

LICENSING AND FLUENCY OF SACROSANCT EXPERIENCE RECALL

Abstract

By David Raska, Ph.D.
Washington State University
May 2009

Chair: David E. Sprott

This dissertation advances the notion that when consumers recall their past sacrosanct experiences (i.e., experiences portraying the self as moral, lovable, and capable), they affirm themselves of their positive self-concept and subsequently feel licensed to self-indulge. Building on research in accessibility experiences and licensing effects in consumer decision making, I demonstrate that recall of past sacrosanct experiences can render two distinctly different processes: retrieval fluency versus substance of retrieved content. While each requires retrieval of a different amount of past experiences as evidence for a positive self-concept, each necessarily leads to licensing effects. According to both theoretical and empirical work presented in this dissertation, it seems that the process that comes into play is likely to depend on the accessibility of sacrosanct experiences. This accessibility is determined by the type of sacrosanct experience and its compatibility with one's self-construal, but only for those whose self-concept is construed predominantly around independence. When people with independent self-construal recalled self-centered sacrosanct experiences (more compatible with independent self-construal), they evaluated their positive self-concept more favorably and were more likely to license after having re-

called a large number of sacrosanct behaviors in which they had previously engaged. In this view, licensing increased as a function of increasing substance of recalled experiences (content-based licensing effect). When people recalled other-centered sacrosanct experiences (less compatible with independent self-construal), a reverse effect emerged. Indeed, people evaluated their positive self-concept more favorably and were more likely to license after having recalled just a small number of such experiences. Licensing increased as a function of increasing fluency with which experiences were retrieved from memory (fluency-based licensing effect). No such effects, however, were found for interdependent self-construals, presumably due to activation of their self-regulation goals that help them avoid making decisions associated with negative self-attributions such as self-indulgent consumption. Work described herein contributes particularly to marketing literature by advancing a novel approach to understanding how consumers' sacrosanct beliefs about the self affect self-indulgent consumption.

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Dedication

This dissertation is dedicated to my wife Marcela whom contributed to this work in so many ways that can't be expressed through the power of my words. The completion of this dissertation is a true testament to her strength, kindness, tolerance, and never-ending encouragement.

I am grateful beyond measure for her support.

CHAPTER ONE

INTRODUCTION

MOTIVATION FOR THE DISSERTATION RESEARCH

What is a self of an American consumer like? On one side, American consumers demonstrate relatively high moral standards, particularly when it comes to virtues such as helping others. Indeed, in 2006, American consumers have become the most charitable and helpful people in the world, with charitable donations by individuals (excluding organizations) reaching its highest mark ever at \$294 billion dollars. According to the U.S. Department of State's Bureau of International Information, over 75% of Americans gives to a wide spectrum of charities and non-profit organizations (excluding donations to religious organizations) each year, giving away 2.2% of their disposable income. Interestingly, 83% of all donated dollars come from households with income \$100,000 or less. Besides providing monetary support to those in need, over 20% of Americans also volunteer their own time and effort, dedicating over 8.1 billion hours of service to various charitable causes. Without question, this anecdotal evidence suggests the majority of American consumers could be viewed as honorably charitable or, simply, virtuous.

Unfortunately, American consumers excel in less virtuous domains as well. Besides dedicating their money and time to virtuous acts, they also dedicate a lot of their income and time to satisfy their own pleasures and interests, many of which violate the ethical convictions commonly shared among those in American culture (Xu and Schwarz 2009). According to the Consumer Expenditure Survey 2006 by the U.S. Bureau of Labor Statistics, Americans spend over 20% of their income for “indulgent” or “unnecessary” items such as entertainment, dining, liq-

uor, apparel, and jewelry. They also maintain one of the highest living standards in the world, gradually acquiring larger and more luxurious homes, cars, trucks, or sport utility vehicles, all of which require an equivalent of over 570 million gallons of gasoline per day to power or to heat. Not surprisingly, the American way of life based on pursuit of wealth, size, and abundance as material surrogates for happiness has been commonly viewed as ecologically catastrophic and unsustainable (Judt 2005). In addition to their extraordinary demand on energy, consumers also demonstrate lack of responsibility when it comes to product disposal—their daily contributions to non-recycled waste to local landfills sum to 942 million pounds. It may not come as a surprise that Americans have become responsible for 25% of all greenhouse gas emissions in the world. What is even more troublesome, however, is that the American way of life has also tragic consequences on Americans' own welfare. Indeed, almost 30% of American consumers have unmanageable levels of debt and over 60% of them carry marginally manageable debt. In addition, almost 20% of consumers do not have medical insurance and almost 50% do not have enough savings for retirement (Clifford 2008). While under certain circumstances, American consumers appear virtuous, it is evident that their less virtuous deeds and demands bear dire consequences for all constituents of today's marketplace.

This anecdotal evidence reveals that the self of a consumer has two relatively conflicting sides: one that is virtuous in nature and keeps giving to others and one that is self-indulgent in nature and keeps giving to oneself, irrespective of the consequences for others. As Figure 1.1 illustrates, one cannot help but to wonder about how these two sides of the same self can stably coexist. Do they coexist in a harmony such that experiences of a virtuous side (e.g., charitable or helpful choices) reduce the negative attributions associated with experiences of its indulgent side

(e.g., hedonic and irresponsible consumption)? In other words, is it possible that virtues license or liberate consumers to engage in indulgent consumption?

FIGURE 1.1

THE TWO SIDES OF A CONSUMER



In fact, researchers have recently recognized that virtues may indeed be related to less virtuous acts such as self-indulgent consumption. For example, participants who expressed a virtuous intent or engaged in a virtuous act in an initial task were subsequently more likely to choose a more indulgent option (i.e., licensing effect; Khan and Dhar 2006). In a similar vein, people are more likely to indulge if a given indulgence is associated with a charitable donation (Strahilevitz and Myers 1998). Given the relatively disproportionate ratio between level of virtuous and indulgent activity of a consumer, one may ask whether consumers really need virtuous incentives or expression of virtuous intent before they indulge. As a majority of consumers is very likely to have some virtuous experiences already accessible in their minds when they face a self-indulgent decision, is it then possible that merely recalling or remembering past virtues can

systematically and predictably affect self-indulgent choices? What if past virtuous experiences work as licenses for indulgent decisions? Herein, I attempt to address these questions and investigate whether the likelihood of making a more self-indulgent choice can be affected by merely thinking of or remembering the virtues that consumers have already accessible in their minds.

When people are asked to access and retrieve information from their minds, the process of retrieval can render available two distinct types of information: the substance or amount of retrieved information (i.e., retrieved content; Schwarz 1998) or the subjective feelings of ease (or difficulty) with which the information is retrieved (i.e., retrieval fluency; Schwarz 1998). Reliance on one or the other of these types of information can lead to opposite effects on judgments, including those about oneself.

As an example, consider two persons who have been asked to recall their past virtuous experiences. Peter has been asked to provide two example of such experiences, while John has been asked to provide ten. If both were subsequently asked about his charitableness, who is more likely to be more convinced of his own virtuousness? Two competing predictions can be made. If the amount of retrieved information is the principal determinant, John might be expected to be more convinced about his virtuous nature, as he likely recalled more virtues than Peter. However, if subjective feelings of ease or difficulty with which the examples were retrieved were relied upon, then the opposite prediction would be made. Indeed, John is likely to have experienced a difficult time during his attempted recall of ten virtues. Accordingly, he might think “I had a difficult time recalling my virtuous behaviors, I must not be a very virtuous person!” In contrast, Peter is likely to have experienced an easy time when recalling his past virtuous deeds and might think “I had an easy time recalling my virtuous behaviors, I must be very virtuous person!” In

this case, the subjective feeling of ease with which information was retrieved (i.e., retrieval fluency) rather than the retrieved content, affected virtuous self-evaluations (e.g., Schwarz et al. 1991).

Herein, I argue that these two distinct types of information can both license Peter and John to choose a more self-indulgent option and that such licensing effects are not limited to virtuous experiences only. This dissertation advances the notion that when consumers recall their past sacrosanct experiences (i.e., experiences portraying the self as moral, lovable, and capable; Dunning 2007), they affirm themselves of their positive nature and subsequently feel licensed to engage in acts that deviate from such a nature (e.g., self-indulgence). Building on research in information accessibility (e.g., Tybout et al. 2005) and licensing effects in consumer decision making (e.g., Khan and Dhar 2006), I demonstrate that recall of past sacrosanct experiences (i.e., retrieving examples of actions that portrayed the self as moral, lovable, or capable) can render likely two distinctly different processes, each requiring a retrieval of a different number of sacrosanct experiences and each leading to licensing effects in which past sacrosanct experiences are used as licenses for self-indulgent choices. I argue that what determines which process is engaged depends on the type of sacrosanct experience and its compatibility with individuals' self-construal. Because each construal is associated with different values that vary in terms of independence (i.e., considering self as unique and distinct from others) and interdependence (i.e., perceiving self as connected with others; Markus and Kitayama 1991; Singelis 1994), I will propose that sacrosanct experiences can be classified into two broad types: *self-centered sacrosanct experiences*, portraying actions that benefit primarily the individual self such as lovable (funny or entertaining) and capable (personal achievement and success); and *other-centered sacrosanct*

experiences, portraying actions that benefit primarily those external to the self as virtuous (charitable or environmentally responsible). In this view, sacrosanct experiences that are more (versus less) compatible with individuals' construal are also assumed to be more (versus less) accessible.

As such, I will suggest that when people whose self-concept is construed around independence recall self-centered sacrosanct experiences (more compatible), these individuals evaluate their positive self-concept more favorably and are more likely to license after having recalled a lot of experiences. Thereby, licensing increases as a function of increasing number of recalled experiences, that is, substance of retrieved content. I refer to this type of licensing as a *content-based licensing effect* in which number of recalled virtuous experiences works as a license for subsequent self-indulgent choice. A reverse effect emerges when these individuals (interdependents) recall other-centered sacrosanct experiences (less compatible). When recalling such experiences, people evaluate their positive self-concept more favorably and are more likely to license after having recalled just a few experiences. Licensing then increases as a function of increasing fluency with which people access their experiences—that is, the subjective feelings of ease or difficulty experienced during recall. I refer to this type of licensing as a *fluency-based licensing effect* in which fluency of virtuous experience recall works as a license for subsequent self-indulgent choice. On the basis of recent research exploring the motives and goals that drive information processing of individuals with different self-construal (e.g., Aaker and Lee 2001), I develop support for the proposition that licensing effects are limited to those with independent self-construal. As interdependents are driven by distinctly different motives and goals, they are less likely to use past sacrosanct experiences as license for self-indulgent choices.

CONTRIBUTION OF THE DISSERTATION RESEARCH

My dissertation will contribute to the marketing literature in three important ways, each related to a better understanding of how sacrosanct side of a consumer affects actions of its self-indulgent side. First, it will add to research on self-indulgent consumption by advancing a novel tactic that marketers may use in order to control consumers' self-indulgent consumption. In contrast to prior research in this domain, this tactic will not require marketers to: tie hedonic products with charitable incentives (Strahilevitz and Myers 1998); serve consumers with an opportunity to make a virtuous choice or express a virtuous intent (Khan and Dhar 2007); tie hedonic products to loyalty programs requiring effort (Kivetz and Simonson 2002a); or engage consumers in effortful tasks followed by excellent performance feedback (Kivetz and Simonson 2002b). Instead, the present idea of recall-based licensing enables marketers to deploy a relatively costless and, from a consumer's perspective, effortless tactic in which merely prompting consumers to recall their virtuous past has the potential to increase (or diminish) preferences for frivolous or indulgent products. In addition, my research demonstrates that virtues may not be the only sacrosanct act that marketers could use to influence self-indulgent decisions. Rather, present work intends to show that consumers can indulge after self-affirmation of their sacrosanct nature in general (e.g., self perceptions of being moral, lovable, and capable).

In addition to contributing to research on indulgent consumption, my dissertation also contributes to research on retrieval fluency and its impact on self-evaluative judgments. Prior research in this domain has shown that when participants recall instances of behaviors they engaged in (e.g., assertiveness), they are more likely to rate themselves as having more of a given quality after recalling just a few rather than many such examples affirming the quality (Schwarz

et al. 1991; Rothman and Schwarz 1998). In this view, people construe their self-evaluative judgments based on retrieval fluency. However, this research has not examined why people rely on fluency when forming self-evaluative judgments in the first place and how these judgments affect subsequent decisions in domains unrelated to the initial fluency experience. My research provides initial insights into these questions. First, it shows that whether self-evaluations are based on retrieval fluency is contingent on the type of past behaviors people are asked to recall and its compatibility with their construal (independent or interdependent). Second, I present a theory that links fluency experiences with self-affirmation and propose that retrieval experiences are a potent way of activating those parts of a self-concept that are related to a given recall task. Third, this fluency-based positive self-concept is then believed to have a systematic influence on judgments or decisions in domains unrelated to the initial recall task.

Finally, this dissertation contributes to research on the role of self-construal in consumer behavior. Recent research in this domain has shown that independent and interdependent self-construals may be driven by a distinctly different set of motives and goals (Aaker and Lee 2001; Zhang and Shrum 2009), but as yet, we have not fully understood what these distinct characteristics imply for self-affirmation and hedonic consumption. In my dissertation, I demonstrate that in general, independents might be more susceptible to self-affirmation effects such as licensing and thus more likely to seek indulgence than interdependents. Though my tests will not be cross-cultural, the results of this research will offer initial evidence for determining whether licensing is more likely to emerge across individualistic cultures such as those in the United States than across more collectivist cultures such as Asia or Eastern Europe.

RESEARCH CONTEXT

My dissertation investigates how recall of sacrosanct experiences leads to self-indulgent decisions. As such, self-indulgent consumption is the primary research context within which I explore the effects of recall experiences. In the following section, I briefly describe what self-indulgent consumption is and why it is an important context for my dissertation research. In general, *self-indulgence* is defined as an excessive or unrestrained gratification of one's own appetites, desires, or whims. Acting in self-indulgent manner is characterized by doing or tending to do exactly what one wants, especially when this involves pleasure and idleness. In the realm of consumer behavior, self-indulgent consumption is described as pleasure-oriented consumption and motivated by the desire of the self for sensual pleasure, fantasy, and fun. Because it is often contrasted with utilitarian consumption (i.e., more goal-oriented consumption motivated by the desire to fulfill a basic need or to accomplish a functional task; Okada 2005; Strahilevitz and Myers 1998; Voss, Spangenberg, and Grohmann 2003), self-indulgent consumption is associated with negative self-attributions for a couple reasons. First, indulgences or hedonic products rank lower in the hierarchy of needs than necessities (Maslow 1970) and thereby provide few functional benefits. As such, they are viewed as irresponsible and wasteful consumption, particularly when contrasted with necessities that are viewed as the target of more responsible consumption practice (Berry 1994; Lascu 1991; Prelec and Loewenstein 1998; Strahilevitz and Myers 1998; Thaler 1980, 1985). Second, American culture tends to endorse a Protestant ethic (Weber 1958) that values hard work and frugal spending. Self-indulgent consumption violates these ethical obligations, making it a subject of difficult justifiability and social objection (Strahilevitz and Myers 1998; Xu and Schwarz 2009). Not surprisingly, much of consumer guilt actually emerges as a

consequence of self-indulgent consumption (Dahl, Honea, and Manchanda 2003; Dhar and Wer-tenbroch 2000).

Given such properties, it is apparent that self-indulgent behavior stands in direct contrast to virtuous behavior. Virtues, in general, portray something that is desirable in a person such as behaviors showing high moral standards or qualities considered morally good or desirable in a given society (e.g., charitable, helpful). Self-indulgence deviates from such a nature, making it an important subject of empirical inquiry, enabling researchers to better understand the conditions under which consumers earn their right to engage in activities that violate otherwise upheld ethical obligations. Despite the fact that it clearly violates these obligations, self-indulgent consumption has also important implications for marketing practice and, especially, consumer welfare. As alluded to earlier, Americans maintain one of the world's highest living standards in terms of luxury living and personal transportation and spend over 20% of their income for "indulgent" products, excluding automobiles and homes. At the same time, Americans are viewed as "financially illiterate and caught up in a web of debt" (Clifford 2008) with almost 30% of consumers with unmanageable levels of debt and over 60% carrying somewhat manageable debt. In addition, almost 20% of consumers do not have medical insurance and almost 50% do not have enough savings for retirement (Clifford 2008). Given the ubiquitous presence of self-indulgent consumption in the marketplace, one may reason that this type of consumption may be affecting how consumers allocate their financial resources (e.g., spending money for indulgences versus saving for retirement). Though speculative, self-indulgent consumption may be associated with potentially dire consequences for all constituents of the marketing environment – consumers (e.g., consumer debt, bankruptcies, insecurity), firms (e.g., cash flow, sustainable marketing

practice), environment (e.g., waste and pollution), and government (e.g., IRS debt). As succinctly summarized by Judt (2005), “the American way of life based on pursuit of wealth, size, and abundance—as material surrogates for happiness—is ecologically catastrophic and unsustainable.” Proper understanding of how marketing practice affects this type of consumption enables marketers to develop socially responsible and sustainable marketing practices that benefit not only the firm, but also consumers and society, both in the short- and long-term.

ORGANIZATION OF THE DISSERTATION

In this dissertation, I investigate whether likelihood of making a more self-indulgent choice can be affected by recalling past sacrosanct experiences accessible in one’s mind. As such, I organize my dissertation around four research questions:

1. *Does recall of past virtuous experiences license a self-indulgence? If so, how does it work?*
2. *What is the boundary condition of this recall-based licensing effect and its underlying mechanism?*
3. *Can recall of other than virtuous experiences (i.e., sacrosanct experiences) lead to licensing effects? If so, how does it work?*
4. *Are all consumers equally susceptible to licensing effects?*

Given the majority of existing research limits its attention to the interplay between virtues and self-indulgence, Chapter 2 is set in these existing foundations and focuses on an initial investigation of how recall of past virtuous experiences affects licensing. In this section, I develop two competing theoretical bases: one supporting the notion of fluency-based licensing effect in which licensing increases as a function of increasing retrieval fluency and the other supporting the notion of content-based licensing effect in which licensing increases as a function of increasing

number of retrieved virtuous experiences. For each of these accounts, I develop a corresponding hypothesis, including predictions regarding its underlying mechanism, and three experimental studies testing each of the developed hypotheses. Study 1a and 1b cover empirical tests of the two competing hypotheses (fluency- versus content-based licensing effects), using two different framings of virtuous recall tasks (charitable and environmentally responsible) and two different types of self-indulgent choice (choice of a more hedonic and expensive product; choice of a relative luxury). Study 2 focuses on testing the underlying process, seeking support for the mediating effect of retrieval fluency (or retrieved content) on positive self-concept and its subsequent mediating impact on licensing.

Having established support for the fluency-based licensing effect in Chapter 2, Chapter 3 develops a theoretical base for a boundary condition of the fluency-based licensing effect in terms of discounting cues. Herein I will propose that presence of cues that discount the difficulty or ease of a recall task reverses the otherwise observed fluency-based licensing effect into a content-based licensing effect. This proposition is tested in Study 3.

The next two chapters focus on the last two research questions in which the principle focus is on understanding whether other positive experiences (i.e., sacrosanct experiences portraying the self as moral, lovable, and capable) lead to licensing and what consumers are more versus less susceptible to these licensing effects. Chapter 4 centers its attention on examination of the effect of recall of sacrosanct experiences on licensing. In this chapter, I present the theory supporting the proposition that whether licensing emerges as an outcome of fluency- or content-based processing depends on the type of sacrosanct experience (self- versus other-centered experiences) people are asked to retrieve and its importance to individual's self-concept. This propo-

sition, including its underlying mechanism, is then empirically tested across two studies. Study 4a tests the underlying mechanism of the interaction between number of requested experiences (i.e., recall task) and the type of sacrosanct experience and its impact on a positive self-concept whereas Study 4b tests the same interaction effect but focuses on its impact on a choice of a more indulgent but less healthy snack (i.e., licensing).

Chapter 5 further builds on the theory and empirical tests covered in Chapter 4 and presents a theoretical base for the proposition that people whose self-concept is construed predominantly around independence (i.e., independent self-construal; Markus and Kitayama 1991) are especially susceptible to both fluency- and content-based licensing effects because of the motives and goals that drive their behavior. In contrast, people whose self-concept is construed predominantly around interdependence (i.e., interdependent self-construal) are not very likely to license because the motives and goals that drive their behavior prevent them from doing so. Subsequently, Study 5 tests the moderating effect of self-construal on the interaction between number of requested experiences (i.e., recall task) and the type of sacrosanct experience (self- versus other-centered) and its impact on self-indulgent decision to establish evidence that licensing concerns individuals with independent self-construals, but not those with interdependent self-construals.

Finally, Chapter 6 summarizes the results of my empirical investigations and discusses their contribution to marketing research, including implications for future research. I then conclude my dissertation with a general discussion of implications of my research for marketing practice.

CHAPTER TWO

LICENSING AND RECALL OF VIRTUOUS EXPERIENCES

Imagine that a person walks into a grocery store to buy a snack and notices a sign asking “Can you remember the last time you helped someone in need?” If the person processes this message and thinks about his or her past virtues, will it impact what is selected for a snack? Is it possible that merely thinking about one’s virtuous past can systematically shift preferences among choices in an unrelated domain? A considerable amount of research suggests that accessibility experiences associated with retrieval of information from one’s memory (i.e., recall) play an important role in how consumers form judgments (for review see Schwarz 2004). Prior consumer research in this domain, however, has predominantly focused on how accessibility experiences affect relatively isolated judgments (e.g., Novemsky et al. 2007; Tybout et al. 2005; Raghurir and Menon 2003). Indeed, we have little understanding of how such experiences bear on subsequent decisions in domains unrelated to the initial experience. In this chapter, I attempt to provide insight into this issue by developing theory supporting the notion that a prior accessibility experience can have a systematic impact on subsequent decisions made in a domain unrelated to such experience.

By integrating research on accessibility experiences (Tybout et al. 2005) with recent research in sequential decision making (i.e., licensing effects; Khan and Dhar 2006), I advance the notion that accessing information about one’s virtuous past (i.e., recall of virtuous experiences) affects how people think of themselves at a present time (e.g., “I am a virtuous person”) which in turn licenses them to deviate from their virtuous nature such that they are more likely to make a

more self-indulgent choice at a later time (i.e., licensing effect). Given that accessibility can render available two different types of informational input for a subsequent judgment, I consequently develop two competing predictions, each leading to opposite effects on licensing. The first prediction supports the notion of content-based licensing effect in which licensing increases as a function of increasing number of retrieved virtuous experiences (i.e., amount or substance of retrieved virtuous experiences; Schwarz 1998). According to this prediction, if people rely on the substance of retrieved content when forming judgments about their virtuous nature, they perceive themselves as more virtuous having recalled many past virtues rather than just a few of them. In this case, likelihood of self-indulgent choice increases as a function of increasing number of retrieved virtuous experiences. The second prediction, however, supports the notion of fluency-based licensing effect in which licensing increases as a function of increasing retrieval fluency (i.e., subjective feelings of ease or difficulty with which virtuous experiences come to a mind; Schwarz 1998). If people rely on the retrieval fluency, rather than the substance of retrieved content, when forming judgments about their virtuous nature, they perceive themselves as more virtuous when retrieving just a few virtuous experiences (i.e., an easy recall with high retrieval fluency) rather than a large number of such experiences (i.e., a difficult recall with low retrieval fluency). Under such conditions, licensing increases as a function of increasing retrieval fluency rather than the number of retrieved experiences. In the following section, I develop the theory that supports each of these competing propositions, including hypotheses regarding its underlying processes, and present a series of three experiments testing my theory.

THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

The notion that recall of past virtuous experiences can affect subsequent decision in a domain unrelated to the initial recall is motivated by recent findings in sequential decision making on licensing effects. According to the *licensing effect* (Khan and Dhar 2006), people are more likely to make a more indulgent choice after they have expressed either a virtuous intent or were committed to a virtuous act in an initial task. In this view, a prior virtuous choice affirms the self of its virtuous nature (i.e., positive self-concept) and subsequently licenses a person to make choices that deviate from such a nature (e.g., choosing a luxury over a necessity). For example, when participants were asked to imagine that they had received a tax rebate of \$500 and were considering donating \$100 to a charity and then asked to choose one of two charities (i.e., prior charitable choice), they were more likely to choose a more hedonic and expensive pair of sunglasses as compared to those participants who were not encouraged to consider a charitable donation. Similarly, when participants were asked to imagine that they had volunteered to spend four hours a week for six weeks doing community service and then asked to indicate one of two community services they would choose to volunteer for (teaching children in homeless shelter or improving environment), they were subsequently more likely to buy an expensive pair of designer's jeans rather than a dull but useful vacuum cleaner than those who did not make a charitable choice (Khan and Dhar 2006).

Thus, a person making a choice between a relative vice and a relative virtue will be more likely to choose a vice if he or she expressed a virtuous intent or became committed to a virtuous act prior to making such a choice. In the following section, I intend to apply this logic and propose that a recall of past virtues (i.e., retrieving virtuous experiences already accessible in one's

mind) may remind and therefore affirm the self of its virtuous nature and consequently serve as a license for a self-indulgent choice at a present time. As alluded to earlier, however, when people retrieve information from memory (i.e., accessibility experience), the process of retrieval can render available two distinct types of information: (1) the subjective feelings of ease or difficulty with which the information is retrieved (i.e., retrieval fluency; Schwarz 1998) and (2) the substance or amount of retrieved information (i.e., retrieved content). As such, if a person uses its already accessible virtuous experiences as licenses for a self-indulgence, the licensing effect may then emerge as an outcome of either of these two types of information. In the section that follows, I develop the theoretical base that supports each of these competing predictions.

Fluency-Based Licensing Effect

A growing body of research in decision making and social cognition documents that people use various naïve theories when thinking and forming judgments based on information accessible in memory (Schwarz 2004). One of the most commonly examined naïve theories is *retrieval fluency*—subjective feelings of ease or difficulty with which thoughts come to a mind during a memory recall (Schwarz et al. 1991). When thoughts come easily to mind, people infer that these thoughts are characteristic or typical of a person or issue than when such thoughts come to mind with difficulty (Schwarz 2004). This naïve theory is consistent with a well-established and documented availability-heuristic that predicts subjective feelings of ease affect people’s inferences about frequency and probability of events (Tversky and Kahneman 1973). When people use this naïve theory, people assume that the subjective feelings they are experiencing are informative in their own right and become an informational input for subsequent judgment (Higgins 1998; Schwarz 2004). Indeed, prior research has repeatedly shown that high re-

trieval fluency elicits a positive affective reaction which in turn contributes to a more positive evaluation, whereas low retrieval fluency elicits a less positive affective reaction, which in turn contributes to a less positive evaluation (Winkielman et al. 2003).

Central to retrieval fluency is the demonstration that people evaluate themselves as having more of a given characteristic when they are asked to recall just a few examples in support of that characteristic (easy recall) than when that are asked to recall a large number of such examples (difficult recall). For example, Schwarz et al. (1991) asked participants to recall six (high retrieval fluency) versus 12 (low retrieval fluency) examples of very assertive behaviors in which they had engaged; research participants evaluated their self-concept as more assertive when the recall task was easy (high retrieval fluency) than when the recall task was difficult (low retrieval fluency). Similarly other researchers have shown that people perceive themselves as more susceptible or vulnerable to a disease (e.g., heart disease, AIDS) after having recalled only a few examples of behaviors in which they had engaged that were known to increase risk of such diseases. However, when many of these behaviors were recalled, they perceived themselves as less vulnerable (Raghubir and Menon 1998; Rothman and Schwarz 1998). These and similar findings are well-documented in the literature and confirm that when it is easy to recall examples of certain behaviors it implies that one must engage in such behaviors frequently and are therefore characteristic of the person, if not thinking of these examples would not be that easy. When it is more difficult to recall examples, however, people assume that they do not engage in these behaviors very often and are therefore not characteristic of them (Tversky and Kahneman 1973; Schwarz et al. 1991).

What does retrieval fluency imply for a recall of past virtuous experiences and its impact on licensing? Recall that the licensing effect is a result of affirming the self of its positive self-concept such that when people establish evidence for their positive self-concept (e.g., “I am a virtuous person”), they feel liberated to choose a more indulgent option (Khan and Dhar 2006). If people use retrieval fluency as a source of information to judge their virtuous nature, they will be more likely to experience a positive self-concept boost and earn their license for self-indulgence, after having experienced high retrieval fluency rather than low retrieval fluency. Specifically, when people are asked to recall just a small number of virtuous acts in which they have previously engaged (i.e., an easy recall task with high retrieval fluency), they will experience a greater positive self-concept boost and be more likely to indulge (e.g., choosing a luxury over a necessity) than when they are asked to recall a large number of past virtues (i.e., a difficult recall task with low retrieval fluency). Under these conditions, licensing will increase as a function of fluency with which prior virtues come to a mind; the easier (more difficult) it feels, the more (less) likely licensing is. I refer to this type of licensing as a *fluency-based licensing effect*. Stated formally:

H1: *People will be more likely to license when asked to recall a small number of virtues (high retrieval fluency) than when asked to recall a large number of virtues (low retrieval fluency).*

Prior research has shown that expressing a virtuous intent in an initial task establishes evidence for one’s positive self-concept which in turn increases likelihood of a self-indulgence (Khan and Dhar 2006). In this view, licensing operates through positive self-concept boost such that activation of positive self-concept (e.g., “I am a virtuous person”) reduces negative self-attributions associated with a subsequent self-indulgent choice (e.g., a vice). This view is consis-

tent with prior research exploring the link between virtues and indulgences, showing that indulgences associated with virtuous incentives can reduce negative self-attributions associated with purchase of hedonic or frivolous products (Strahilevitz and Myers 1998). In the context of the current research, it is argued that retrieval fluency serves as an evidence of a positive self-concept which in turn influences the likelihood of making an indulgent choice. Thus, following mediation effects will hold:

H2: *The effect of requested number of virtues on positive self-concept is mediated by retrieval fluency and the effect of retrieval fluency on licensing is mediated by positive self-concept such that:*

H2a: *Recall of a small (large) number of virtues leads to high (low) retrieval fluency, which in turn leads to a more (less) positive self-concept.*

H2b: *High (low) retrieval fluency leads to a more (less) positive self-concept, which in turn increases (decreases) likelihood of licensing.*

Paradoxically, if these predictions hold and retrieval fluency is used as information about positive self-concept, people will license more the fewer virtuous deeds they recall. One might expect that having recalled many virtuous acts would suggest that a person is more virtuous and should therefore have more credentials for a positive self-concept and self-indulgent choices. A fluency-based view of licensing, however, suggests that people may actually earn their right to license based on being asked to recall just a few past virtues. Though this proposition is consistent with prior research on naïve theories in memory-based judgments (Schwarz 1998, 2004), it stands in contrast to a considerable amount of research showing that judgments are often based on thought content whereby more favorable thoughts lead to more favorable judgments (Petty and Cacioppo 1979). In addition, it also contradicts prior research on self-indulgent consumption that shows greater effort leads to preference for self-indulgent products (Kivetz and Simonson

2002a, 2002b). Thus, in the section that follows, I develop a competing prediction in which the licensing effect emerges as an outcome of retrieved content, rather than of subjective feelings.

Content-Based Licensing Effect

A considerable amount of research on judgments and decision making shows that people form judgments on the basis of cognitive information that is applicable to a given judgment and is accessible in memory at the time of judgment (Anderson 1981; Higgins 1996). Contrary to reliance upon subjective feelings as informational inputs for judgments and therefore use of heuristic processing, forming judgments on the basis of cognitive information employs central and more effortful processing in which judgments are construed on the basis of the amount of retrieved content (Petty and Cacioppo 1979; Tybout et al. 2005). In this view, retrieving many thoughts related to a given judgment leads to more positive evaluations, whereas recalling just a few thoughts leads to less positive evaluations. For example, when Rothman and Schwarz (1998) asked participants with a family history of heart disease to assess how vulnerable they were to the disease, participants perceived themselves at more risk after having recalled a large number of behaviors they performed that increased such risk than after having recalled a small number of these behaviors. Similarly, Schwarz et al. (1991) showed that when participants whose attention was drawn away from retrieval fluency were asked to recall six versus 12 examples of their assertive behaviors, they perceived themselves as more assertive after having recalled 12 examples of their assertiveness. These findings confirm that when people recall many examples of certain behaviors it implies that one must engage in such behaviors frequently and are therefore characteristic of the person. However, when people recall just a few examples, people conclude that they do not engage in these behaviors very often and are therefore not characteristic of them.

In the context of licensing, these findings provide support for a more intuitive account, which suggests licensing may increase with greater number of recalled virtues, especially if virtuous experiences are highly accessible in memory. Thus, when people who are asked to recall just a few examples of virtuous behaviors that they have performed (an easy recall task) will experience a smaller (not greater) positive self-concept boost and be less (not more) likely to indulge than when asked to recall many examples of virtuous behaviors (a difficult recall task). Interestingly, there is another reason that supports the notion that a more difficult task may increase likelihood of licensing. Specifically, Kivetz and Simonson (2002a) showed that when participants engaged in an effortful task, they were more likely to choose an indulgence rather than a necessity as a reward than those who engaged in less effortful task. Presumably, greater effort provides people with a reason to indulge, making justification of self-indulgent behavior easier to justify (Kivetz and Simonson 2002a). In support of this logic and consistent with judgments based on central processing, licensing will increase not as a function of retrieval fluency (i.e., subjective feelings of ease with which virtues are retrieved) but as a function of the amount of retrieved content (i.e., an difficult recall task) such that the more (fewer) virtues a person recalls, the more (less) likely licensing is. I refer to this type of licensing as a *content-based licensing effect*. The following should then hold:

H3: *People will be more likely to license when asked to recall a large number of virtues (large substance of retrieved content) than when asked to recall a small number of virtues (small substance of retrieved content).*

As discussed earlier, licensing operates through enhancement of positive self-concept. In contrast to fluency-based licensing effect, however, substance of retrieved content serves as an evidence of a positive self-concept, rather than retrieval fluency. Thus, participants who are

asked to recall a large number of virtues will generate a larger amount of virtuous experiences as evidence for positive self-concept, which in turn leads to greater licensing. Stated formally, following mediation effects will hold:

- H4:** *The effect of requested number of virtues on positive self-concept is mediated by retrieved content and the effect of retrieved content on licensing is mediated by positive self-concept such that:*
- H4a:** *Recall of a small (large) number of virtues leads to large (small) retrieved content, which in turn leads to a more (less) positive self-concept.*
- H4b:** *Large (small) retrieved content leads to a more (less) positive self-concept, which in turn increases (decreases) likelihood of licensing.*

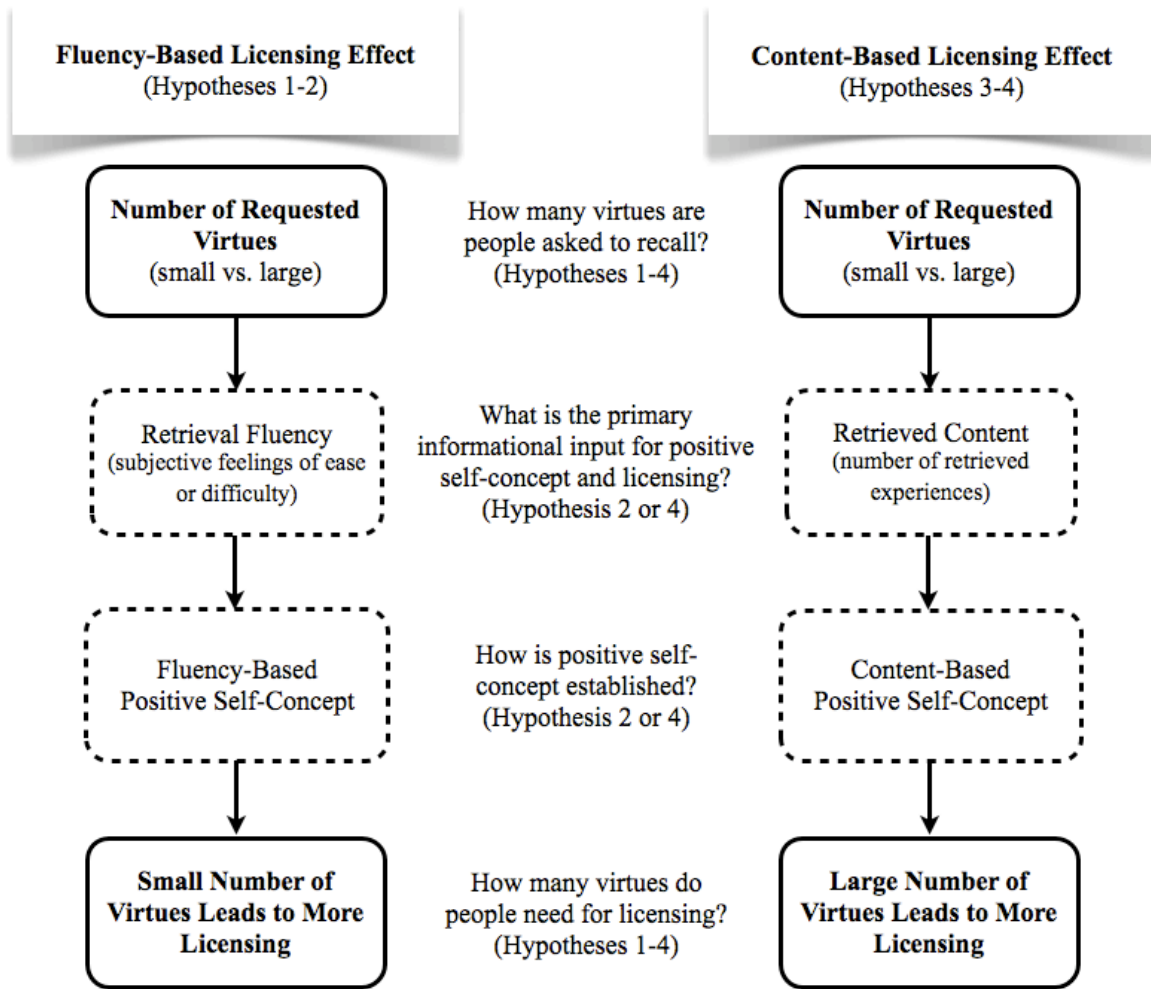
In this section, I developed two competing theoretical bases for recall-based licensing effects: one supporting the notion of fluency-based licensing effect in which licensing increases as a function of increasing retrieval fluency and the other supporting the notion of content-based licensing effect in which licensing increases as a function of increasing number of retrieved virtuous experiences. Both of these predictions suggest that when people recall their past virtuous experiences (e.g., charitable, environmentally responsible), they affirm themselves of their positive nature and subsequently feel licensed to engage in acts that deviate from such a nature (e.g., self-indulgence). Each of these predictions, however, is based on two distinctly different processes, each requiring a retrieval of a different number of virtuous experiences. Whereas fluency-based licensing effect requires recalling just a few virtues as evidence for positive self-concept and license to self-indulge, content-based licensing effect requires recalling a large number of such virtues to attain the same effect. In the following section, I present research designs, methods, and results of three studies that seek support for one of these two competing propositions to determine whether licensing based on virtues accessible in memory leads to fluency- or content-

based licensing effects. The conceptual framework developed and then tested in this chapter is presented in Figure 2.1.

FIGURE 2.1

CONCEPTUAL FRAMEWORK DEVELOPED IN CHAPTER 2

AND TESTED IN STUDIES 1-2



RESEARCH DESIGNS, METHODS, AND RESULTS

STUDY 1A: THE EFFECTS OF PRIOR VIRTUOUS CHOICE AND NUMBER OF REQUESTED VIRTUOUS EXPERIENCES ON A HEDONIC CHOICE

Study 1a demonstrates how recall of virtuous experiences (helping others in community) affects likelihood of choosing a more self-indulgent choice (choice between two pairs of sunglasses, one of which is more hedonic and expensive) in order to establish initial support for one of the competing predictions: fluency-based licensing effect (Hypotheses 1-2) versus content-based licensing effect (Hypotheses 3-4). In addition, Study 1a attempts to replicate licensing effect reported by Khan and Dhar (2006). These authors have shown the licensing effect in the context of sequential decision making. In their studies, when participants were asked to imagine that they volunteered to spend four hours a week for six weeks doing community service and then were asked to indicate one of two community services they would choose to volunteer for (teaching children in homeless shelter or improving environment), they were subsequently more likely to buy a more expensive and hedonic pair of sunglasses than those participants who did not make a virtuous choice. By attempting to replicate these findings, it will be possible to compare licensing effects based on thinking about past virtuous acts (i.e., past virtues accessible in memory) with those based on commitment to virtuous acts in an initial task. Moreover, it will potentially enable demonstration that the effects of accessibility experiences on subsequent decisions may be conceptualized as sequential decisions.

Method

Participants and Design. Participants were 180 U.S. undergraduate science students (59.4% females, $M_{\text{age}} = 22.40$) who volunteered to participate in a study at the end of their class meeting. The experiment was conducted in a classroom setting as a paper and pencil survey. Groups of up to 80 participants were randomly assigned to one of the four conditions in two separate studies: Khan and Dhar's study (condition: virtuous choice vs. control) or a recall study (number of requested virtues: small vs. large). Both studies involved between-subjects design.

Procedures. As the main differences across the four conditions involve what happens prior to making a self-indulgent decision, I first describe the self-indulgent decision and then focus on the description of what participants did prior to the self-indulgent decision in each of the four conditions. Participants in all conditions were asked to imagine that they received an income tax rebate of \$500 and were asked to assume that they were considering buying a pair of sunglasses for themselves with part of the tax rebate money. Participants were then given a choice between two pairs of sunglasses, one of which was more hedonic and expensive (see Figure 2.2).

Prior to this decision, participants in each condition completed a different licensing task. Participants replicating Khan and Dhar's study were randomly assigned to either a virtuous-choice (i.e., licensing) condition or a control condition. Following procedures used by Khan and Dhar (Study 2; 2006), participants assigned to a virtuous choice were asked to imagine that they had volunteered to spend three hours a week doing community service and were then provided with descriptions of two community services ("teaching children in a homeless shelter" and "improving the environment"). Participants were then asked to choose one and state reasons for their choice. This procedure was used to ensure participants' involvement with a task and that level of

FIGURE 2.2

CHOICE BETWEEN MORE AND LESS HEDONIC PRODUCT

Imagine that you received a tax rebate of \$500 from the IRS (Internal Revenue Services) and are now thinking of buying a pair of sunglasses with this money. Consider the following options:

Sunglasses A	Sunglasses B
<ul style="list-style-type: none">• Italian designers frames• Highly resistant to scratch and impact• Ultra lightweight with adjustable temples and nose pads	<ul style="list-style-type: none">• American frames• Resistant to moderate impact and scrape• Regular weight with fixed temples and nose pads
Average customer rating: ★★★★★ Price: \$ 110	Average customer rating: ★★★★☆ Price: \$ 50

Note. Adopted from Study 2 by Khan and Dhar (2006).

involvement in this condition was comparable with conditions in a recall study. Participants assigned to control condition were not prompted to consider choosing between charitable services. Finally, participants assigned to a recall study were randomly assigned to one of the two conditions. Participants were asked to remember two or 10 examples of actions in which they volunteered to help others in their community (i.e., virtuous experience). Prior research has shown that retrieving few examples is viewed as an easy retrieval or high fluency task whereas retrieving more examples is viewed as a difficult retrieval or low fluency task (Schwarz et al. 1991). The remainder of the study was identical across all conditions. Participants in all conditions completed an unrelated filler task (i.e., completing short scales for an unrelated study); the study culminated with a decision task (i.e., choice of sunglasses). After participants indicated their

sunglasses choice, they responded to an open-ended question asking them to share the reasons for their choice. Consistent with Khan and Dhar (2006), this question was used to explore whether participants were aware of a relationship between their prosocial and hedonic decisions (Khan and Dhar 2006). Following this open-ended question, participants in a recall study completed manipulation check for number of requested virtues. At the end of the study session, all participants were debriefed and thanked for their participation.

Stimuli and Measures

Independent Variables. As described in procedures, a virtuous choice was adopted from Khan and Dhar (Study 2; 2006) and consisted of a choice between two charitable acts (“teaching children in a homeless shelter” and “improving the environment”). The manipulation of number of requested virtues consisted of asking participants to remember two or 10 examples of actions in which they volunteered to help others in their community. A pretest (N = 22) confirmed that retrieving two examples of volunteering to help others was easier than retrieving 10 examples (1-very easy/7-very difficult; $M_{\text{high fluency}} = 2.19$ vs. $M_{\text{low fluency}} = 5.64$, $t(20) = 9.01$, $p < .001$). This procedure was adopted from prior research (Schwarz et al. 1991) that has shown that recalling a small number of examples is easier (high retrieval fluency or small retrieved content) than recalling a lot of examples (low retrieval fluency or large retrieved content). Appendix B shows an example of this manipulation.

Dependent Variable. The only dependent variable in Study 1a was a choice between two pairs of comparable sunglasses, one of which was perceived as more hedonic and expensive than the other, but they both were perceived equally functional. A separate pretest conducted prior to Study 1a confirmed these product perceptions. In this pretest (N = 99), participants were ran-

domly assigned to evaluate either sunglasses A depicted as a luxury item (Italian frames sunglasses for \$110) or sunglasses B depicted as a necessity item (American frames sunglasses for \$50). Participants then completed measures of utilitarian and hedonic product dimensions measured by 10 items on a seven-point scale (Voss et al. 2003) and perceived consumer-guilt measured by two items on a seven-point scale (Dahl et al. 2003). Guilt measure was included to assure that a given choice is associated with negative self-attributions that should accompany self-indulgent decisions (Dahl et al. 2003; Okada 2005). Appendix A shows both of these measures. The results confirmed that sunglasses A were perceived as more hedonic ($M = 5.56$, $SD = .88$) than sunglasses B ($M = 4.39$, $SD = 1.52$, $t(97) = 4.73$, $p < .001$) but they were perceived as equally utilitarian ($M_A = 4.67$, $SD = .96$ vs. $M_B = 4.76$, $SD = 1.25$, $n.s.$). In addition, participants indicated that they would feel more guilt after having purchased sunglasses A ($M = 4.63$, $SD = 1.48$) than sunglasses B ($M = 3.58$, $SD = 1.77$, $t(97) = 3.19$, $p = .002$). Consistent with Khan and Dhar (2006), the results of this pre-test confirmed that sunglasses can be viewed as either a luxury or a necessity, depending on product features and price. Appendix B shows an example of this choice.

Manipulation Checks. Following Schwarz et al. (1991), manipulation check for number of requested virtues is treated as a measure of retrieval fluency in all studies presented in this dissertation and is measured by a single item asking participants to rate how difficult it was to generate the requested number of experiences on a scale ranging from very difficult (1) to very easy (7) such that higher scores represent higher retrieval fluency. In addition, retrieved content is measured by counting the number of virtues participants actually listed such that more virtues retrieved represent greater substance of retrieved content.

Results

Manipulation Checks. As expected, participants indicated that it was easier to recall two virtuous experiences ($M = 6.44$, $SD = .66$) than it was to recall 10 virtuous experiences ($M = 2.83$, $SD = 1.34$; $t(70) = -14.52$, $p < .001$). Further, participants listed 1.83 ($SD = .38$) virtuous experiences when asked to recall two virtues and 5.81 ($SD = 2.88$) virtuous experiences when asked to recall 10 virtues ($t(70) = 8.21$, $p < .001$). These results suggest that the recall manipulation was successful. Participants recalled more and felt it was more difficult when asked to retrieve 10 virtues than when asked to retrieve just two virtues.

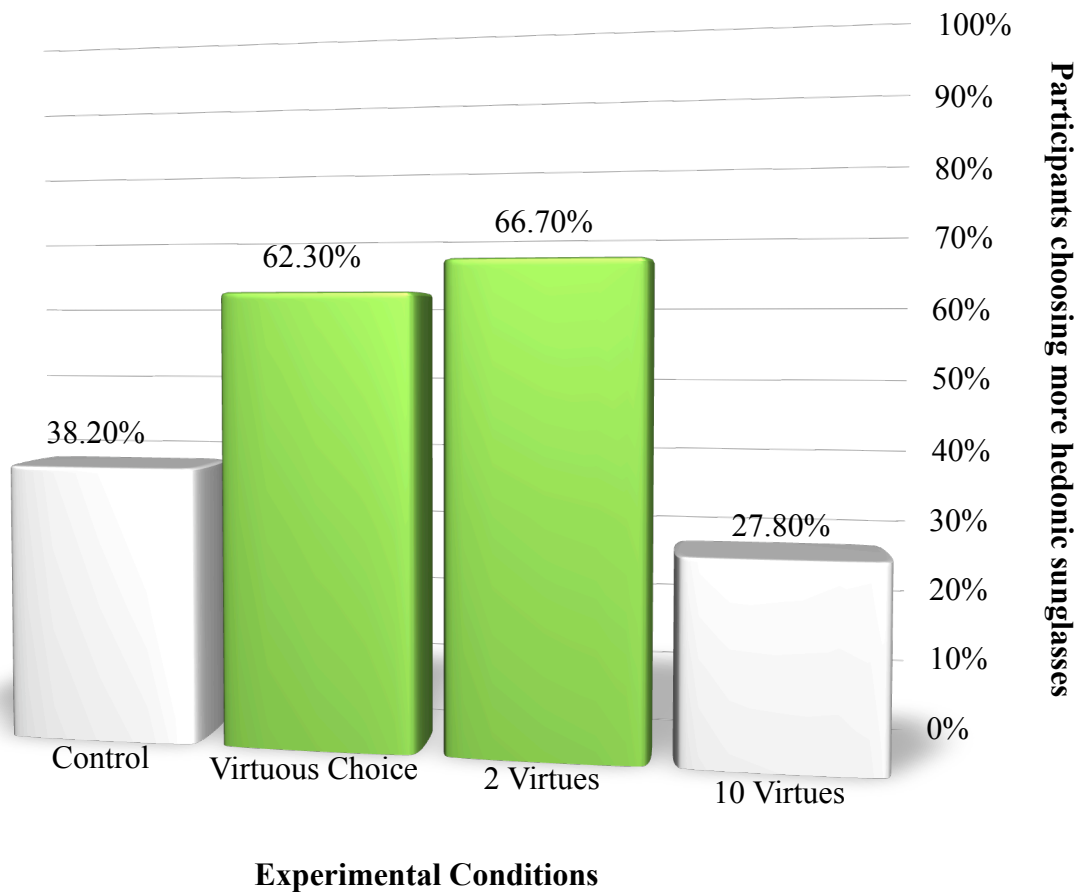
The Effects of Prior Virtuous Choice and Recall of Virtues on a Hedonic Choice. According to the licensing effect based on commitment to a virtuous act (Khan and Dhar 2006), participants in the virtuous choice condition (licensing condition) should be more likely to choose the more hedonic and expensive sunglasses than those in control condition who did not make such a charitable choice. Consistent with this prediction, 62.3% of participants in the licensing condition chose to buy the more hedonic and expensive sunglasses whereas only 38.2% of participants in the control condition chose to do so ($\chi^2 = 6.26$, $p = .012$). This effect is consistent with that reported by Khan and Dhar (Study 2; 2006) in which 56.2% of participants in the licensing condition chose the more hedonic and expensive option as compared to 27.7% of participants in the control condition ($\chi^2 = 7.95$, $p < .05$; taken from Khan and Dhar 2006).

Of more importance, however, is what happens when participants are asked to recall few or several virtuous acts. Would thinking about one's virtuous past license a self-indulgent choice? If so, would such licensing effect result from a few or a lot of recalled virtues? Counter-intuitively, Figure 2.3 reveals that recalling a lot of past virtues did not license participants in

choosing a more indulgent option. Instead, participants were more likely to license when they recalled just a few virtuous experiences (high retrieval fluency) than when they recalled a lot of these experiences (low retrieval fluency). Indeed, 66.7% of participants in high fluency condition chose the more hedonic and expensive sunglasses whereas only 27.8% of participants in the low fluency condition chose the more hedonic sunglasses ($\chi^2 = 10.92, p = .001$). Perhaps counterintuitively, participants who recalled almost three times more virtues than those in low fluency

FIGURE 2.3

THE EFFECTS OF PRIOR VIRTUOUS CHOICE AND NUMBER OF REQUESTED VIRTUOUS EXPERIENCES ON A HEDONIC CHOICE



condition were less likely to license. Thus, these findings provide initial support for the Hypothesis 1, suggesting that when people recall their past virtues, they become more likely to indulge when such experiences come easy to their minds but are less likely to do so when these experiences are difficult to bring to a mind (fluency-based licensing effect supported).

Analysis of Cognitive Responses. In order to shed some light on whether the licensing effect occurs beyond participants' awareness, as was the case in licensing effects based on prior virtuous choices (Khan and Dhar 2006), participants were asked to share their reasons for buying the sunglasses of their choice after they indicated which sunglasses they would buy. Responses to this question were coded by an independent coder blind to the hypothesis. Following procedures used in prior research on the licensing effect (Khan and Dhar 2006), the reasons were coded in order to identify whether participants made a reference to the first task (charitable choice task or recall task) and whether they stated that the first task liberated their sunglasses choice. The results of this analysis were consistent with those reported by Khan and Dhar (2006), confirming that none of the participants were aware that the initial task had any influence on their choice of sunglasses, regardless of a condition they were assigned to. Though a few participants listed thoughts related to self-indulgent behavior (e.g., "Everyone needs to indulge from time to time," "I just feel like rewarding myself"), the majority of thoughts were related to product attributes (e.g., "Higher quality will last longer"), price (e.g., "It is a waste to buy expensive sunglasses"), and usage (e.g., "I lose sunglasses very often"). Together, these results provide evidence that the effect of a recall of virtuous experiences on licensing occurs outside of people's awareness.

Discussion

Study 1a successfully replicated the licensing effect reported by Khan and Dhar (2006) such that participants in the virtuous-choice condition were more likely to choose the more hedonic and expensive sunglasses than those in control condition who did not make such a choice. More importantly, however, present study revealed that recall of past virtues can lead to a similar licensing effect and provided initial support for the more counter-intuitive fluency-based licensing effect rather than the content-based licensing effect. Indeed, participants who recalled just a few virtuous experiences (high retrieval fluency) were more likely to choose the more expensive and hedonic sunglasses than participants who recalled a lot of virtuous experiences. Interestingly, participants who recalled a large number of virtues and therefore reported greater evidence of their virtuous experiences were less likely to choose a more hedonic option than those who retrieved just two virtues (27.80% vs. 66.70%) or those who expressed a virtuous intent (27.80% vs. 62.30%, $\chi^2 = 10.21, p = .001$). Instead, they were more likely to choose the less indulgent and less expensive option. These results provide initial support for the less intuitive prediction in which recall of past virtues licenses self-indulgent choices on the basis of retrieval fluency—that is, the processing ease with which past virtues are retrieved rather than the amount or substance of retrieved virtues. Presumably, when thinking about virtues, it is less about the substance of virtues and more about the feelings accompanying the thinking process in licensing. In order to further generalize this fluency-based effect, Study 1b attempts to replicate the fluency-based licensing effect using a different type of a virtue and different type of a self-indulgent choice.

STUDY 1B: THE EFFECT OF NUMBER OF REQUESTED VIRTUOUS EXPERIENCES ON CHOICE OF A LUXURY

Study 1a found initial support for the fluency-based licensing effect and revealed that this type of licensing results in an outcome comparable to that observed by Khan and Dhar (2006) in which licensing was based on commitment to a virtuous act. Given that the primary focus of my research is on fluency- versus content-based licensing effects, all subsequent studies focus on licensing effects based on recall of past virtues only, without further replications of licensing effects based on a prior choice. Study 1b intends to generalize fluency-based licensing effect from Study 1a into a different type of self-indulgent choice in which participants make a choice between a relative luxury (designer jeans) and a necessity (a vacuum cleaner; cf. Khan and Dhar 2006, Study 1). In addition, it uses a different framing of a past virtue. Instead of asking participants to retrieve examples of actions in which they helped others, participants are asked to recall their past environmentally responsible virtues.

Method

Participants and Design. Participants were 54 undergraduate marketing students (44.4% females, $M_{\text{age}} = 22.96$) who received course credit in exchange for their participation. The experiment was conducted in a classroom setting as a paper and pencil survey. Participants were randomly assigned to one of the two recall conditions (number of requested virtues: 2 vs. 10) in a between subjects design study.

Procedures. Similar to the first study, participants were asked to remember either two or 10 examples of actions in which they acted in environmentally responsible ways. Following this task, participants proceeded directly to an ostensibly unrelated decision-task, adopted from Khan

and Dhar (Study 1; 2006). In this task, participants were asked to imagine that they were at a shopping mall that was having a sale and then asked to choose between designer jeans (a relative luxury) and a vacuum cleaner (a relative necessity), both priced at \$50. In addition, participants were told to assume that they had been planning to purchase the two items but could afford to buy only one at the moment. After they indicated their choice, they responded to an open-ended question asking them to share the reasons for their choice. Following this open-ended question, participants completed a manipulation check question. At the end of the study, participants responded to basic demographic questions (age and gender used as covariates), were debriefed and thanked for their participation.

Stimuli and Measures

Independent Variable. Study 1b manipulated number of requested virtues (2 vs. 10) using the same procedure as in Study 1a but with a different type of a virtuous experience such that participants were asked to recall their experiences with environmentally responsible actions.

Dependent Variable. The choice task consisted of a choice between a luxury and a necessity. As necessities such as a vacuum cleaner are desired to fulfill a basic need or to accomplish a functional or practical task and hedonic products such as designer jeans are motivated by a desire for pleasure, fantasy, and fun (Strahilevitz and Myers 1998), a choice between a necessity and a luxury is perceived as yet another type of self-indulgent choice that is commonly associated with negative self-attributions (Okada 2005). A separate pre-test was conducted prior to Study 2 to show that a present choice worked as intended. In the pre-test (N = 41), participants were randomly assigned to evaluate either vacuum cleaner on sale for \$50 or designer jeans on sale for \$50. Similar to the pretest in Study 1a, participants completed a short version of utilitarian and

hedonic product dimension scale measured by four items on a seven-point scale (Voss et al. 2003) with two items measuring utilitarian dimension (1-not practical/7-practical; 1-unnecessary/7-necessary) and two items measuring hedonic dimension (1-dull/7-exciting; 1-not fun/7-fun). Perceived guilt was measured by two items adopted from the same scale that was used in the pretest for Study 1a (“Indicate the degree of guilt you would feel if you bought designer jeans/vacuum cleaner: 1-no guilt/7-a lot of guilt; 1-not at all bad/7-very bad”). The results confirmed that vacuum cleaner was perceived more as a necessity ($M = 5.57$, $SD = .83$) than designer jeans ($M = 4.14$, $SD = .50$, $t(39) = -6.60$, $p < .001$), and designer jeans were perceived more as a luxury ($M = 6.29$, $SD = .34$) than a vacuum cleaner ($M = 2.95$, $SD = .79$, $t(39) = 17.67$, $p < .001$). As expected, participants indicated that they would feel more guilt after having purchased designer jeans ($M = 5.00$, $SD = .95$) than a vacuum cleaner ($M = 2.75$, $SD = .91$, $t(39) = 7.74$, $p < .001$). These results confirm that a luxury such as designer jeans is perceived as more hedonic but less utilitarian than a practical product such as a vacuum cleaner.

Manipulation Checks. As a check on the effect of a recall manipulation (i.e., retrieval fluency), participants rated how difficult it was to generate the requested number of examples on a scale ranging from very difficult (1) to very easy (7). As in Study 1a, number of listed virtues was used as a measure of retrieved content.

Results

Manipulation Checks. Consistent with Study 1a, participants perceived remembering examples of their environmentally responsible virtues as easier when asked to recall two virtues ($M = 5.70$, $SD = 1.35$) than when they were asked to recall 10 virtues ($M = 2.41$, $SD = 1.15$; $t(52) = -9.64$, $p < .001$). On average, participants listed 1.93 ($SD = .27$) virtues when asked to recall two

and 7.04 (SD = 2.58) virtues when asked to recall 10 ($t(52) = 10.24, p < .001$). These results parallel those reported in Study 1a and suggest that the manipulation of number of requested virtues worked as intended.

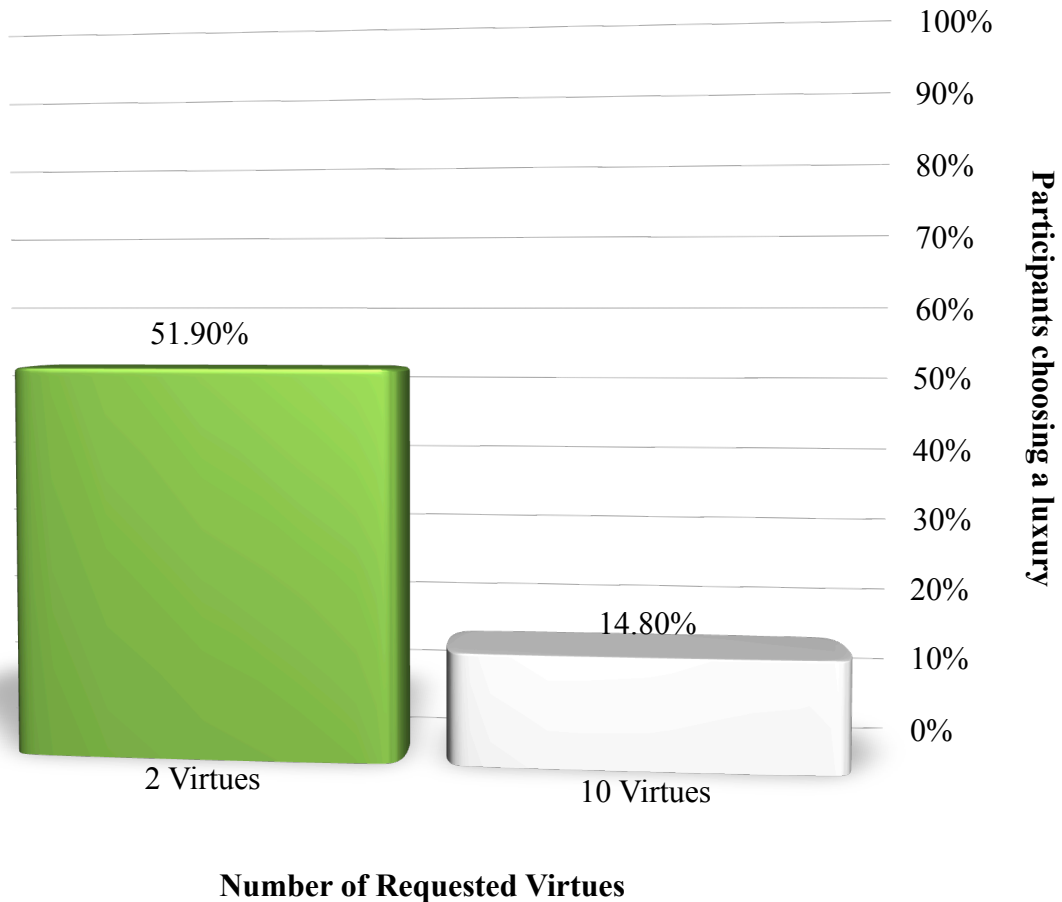
Covariates. Gender and age were treated as covariates. As research on licensing effects is still scant, understanding whether systematic variations across gender or age exist may provide further insights into practical implications of current research. A logistic regression model with choice as a categorical dependent measure and number of requested virtues, gender, and age as independent variables was used to analyze whether gender or age influence self-indulgent choice. In the model, number of requested virtues (1 = 10 virtues, 0 = 2 virtues) and gender (1 = female, 0 = male) were entered as two-level categorical independent variables and age as a continuous independent variable. The results revealed a main effect of number of requested virtues ($\beta = -1.80, \text{Wald} = 7.23, p = .007$) but no main effects of gender ($p = .90$) or age ($p = .63$). These results suggest that the effect of number of requested virtues is not confounded by age and gender and that neither age or gender affect the dependent variable. As all subsequent studies revealed similar pattern of results, gender and age are not further discussed.

The Effect of Recall of Virtues on a Choice of a Luxury. The main goal of Study 1b was to generalize the fluency-based licensing effect into a different choice setting and using a different type of a virtue. As Figure 2.4 illustrates, 51.90 % of participants who were asked to recall only two virtuous experiences (high retrieval fluency) chose a pair of designer jeans whereas only 14.8% of participants who were asked to recall 10 virtuous experiences (i.e., low retrieval fluency) chose a pair of designer jeans rather than a vacuum cleaner ($\chi^2 = 8.33, p = .004$). Consistent with the results of Study 1, the present study succeeded in replicating the fluency-based li-

censing effect, thus providing further support for Hypothesis 1. When participants were asked to retrieve their past virtues, recalling fewer past virtuous lead to more licensing whereas recalling a lot of virtues lead to less licensing. These effects are consistent with fluency-based rather than content-based licensing effect.

FIGURE 2.4

**THE EFFECT OF NUMBER OF REQUESTED VIRTUOUS EXPERIENCES
ON CHOICE OF A LUXURY**



Analysis of Cognitive Responses. Following the same coding procedures as in Study 1, the analysis of participants' justification of their choice revealed that participants were unaware

of the connection between the recall task and the decision task. These results provide further evidence that the fluency-based licensing effect occurs outside of people's awareness.

Discussion

Study 1b replicated fluency-based licensing in a context of a choice between a luxury and a necessity and using environmentally responsible actions as another type of virtuous experience. Consistent with Study 1a, recalling past virtues lead to more licensing when retrieving just a few rather than a lot of virtues. Participants who recalled two examples of their environmentally responsible actions were more likely to choose a luxury (designer jeans) than those who retrieved, on average, seven environmentally responsible experiences. Despite the fact that these participants recalled three times more virtues, they were less likely to choose a luxury rather than a necessity. Together, the first two studies provided relatively robust and generalizable evidence for the fluency-based licensing effect (Hypothesis 1). Having provided the initial support for this type of licensing, the next study focuses on the mechanism underlying the effect of retrieval fluency on licensing.

STUDY 2: THE UNDERLYING MECHANISM OF THE FLUENCY-BASED LICENSING EFFECT

Study 1a and 1b provided convergent evidence that recalling virtuous experiences was likely to affect licensing through retrieval fluency, rather than retrieved content. If people use retrieval fluency as a license to self-indulge, fluency should also influence positive self-concept such that recall of a small number of virtues would lead to a high retrieval fluency which in turn would lead a greater positive self-concept and licensing (Hypothesis 2). The present study fo-

cuses on testing this underlying mechanism by seeking support for the mediating effects of retrieval fluency on positive self-concept and of positive self-concept on licensing. In the current study, these propositions are tested in the context of relative preferences for luxuries (i.e., willingness to purchase a luxury), using past experiences with helping others as virtues.

Method

Participants and Design. Participants were 59 undergraduate marketing students (59.3 % females, $M_{\text{age}} = 21.53$) who received course credit for their participation. Groups of up to 12 participants completed the study in a computer lab. Participants were randomly assigned to one of the two recall conditions (2 virtues vs. 10 virtues) in a between-subjects design study.

Procedures. Depending on the recall condition, participants were asked to remember and then list either two or 10 virtuous experiences of helping others in their community. Following this recall task, participants proceeded to an ostensibly unrelated self-assessment survey introduced as a separate study. In this survey, participants were asked to indicate the extent to which they agreed or disagreed with eight self-assessment statements, including four items measuring positive self-concept (e.g., “I am a compassionate and helpful person”). Each of these items appeared on a separate computer screen and in a counter-balanced order. Upon completion, participants proceeded to a shopping mall task used in Study 1b. Participants in this decision task were asked to indicate their relative preference for a luxury (designer jeans) or a necessity (vacuum cleaner). Participants were then again asked to respond to an open ended question about the reasons for their choice. At the end of the study, participants completed a manipulation check and were dismissed from the study session.

Stimuli and Measures

Independent Variables. As in Study 1a, recall of virtuous experiences was manipulated by asking participants to recall either two or 10 examples of actions in which they volunteered to help others in their community.

Dependent Measure. Following procedures used by Khan and Dhar (2006), participants were asked to imagine that they were at a shopping mall that was having a sale and asked to choose between designer jeans and a vacuum cleaner, both on sale for \$50. As in Study 1b, participants were told to assume that they had been planning to purchase the two items but could afford to buy only one at the moment. They were then asked to indicate their relative preference on a scale ranging from “most likely to buy the vacuum cleaner” (1) to “most likely to buy the designer jeans” (7).

Process Measures. Study 2 tests mediation effects of retrieval fluency and positive self-concept. The manipulation check for number of requested virtues was used as a measure of retrieval fluency and measured by a single item asking participants to rate how difficult it was to generate the requested number of examples in the thought listing task on a scale ranging from very difficult (1) to very easy (7). Consistent with Khan and Dhar’s (2006) methodology, positive self-concept was measured using a self-assessment task in which participants evaluated themselves on personality traits that were likely to be relevant to being charitable and helpful. This method is also consistent with prior research on social cognition that suggests measuring changes in state self-concept through items adopted from state self-esteem scale (Heatherton and Polivy 1991; Baumeister 1999). Likewise, participants in the present study indicated the extent to which they agreed or disagreed with following statements: “I am compassionate,” “I am

warm,” “I am helpful,” and “I am sympathetic” on a seven-point scale (1-strongly disagree/7-strongly agree). To minimize guessing, items were embedded in a series of four other irrelevant items (see Appendix C).

Manipulation Checks. The manipulation check for a recall of virtuous experiences was measured by a single item asking participants to rate how difficult it was to generate the requested number of experiences and was used both as a manipulation check and a process measure of retrieval fluency. Number of listed virtues was used as a measure of substance of retrieved content (Schwarz et al. 1991).

Results

Manipulation Checks. As in the preceding studies, participants perceived recalling two virtues easier ($M = 5.75$, $SD = 1.16$) than recalling 10 virtues ($M = 2.93$, $SD = 1.04$; $t(57) = -9.76$, $p < .001$). Consistent with preceding studies, participants listed 1.88 ($SD = .34$) virtues when asked to recall two and 6.93 ($SD = 1.84$) virtues when asked to recall 10 ($t(57) = 15.27$, $p < .001$). Thus, the manipulation of a recall of virtuous experiences worked as intended.

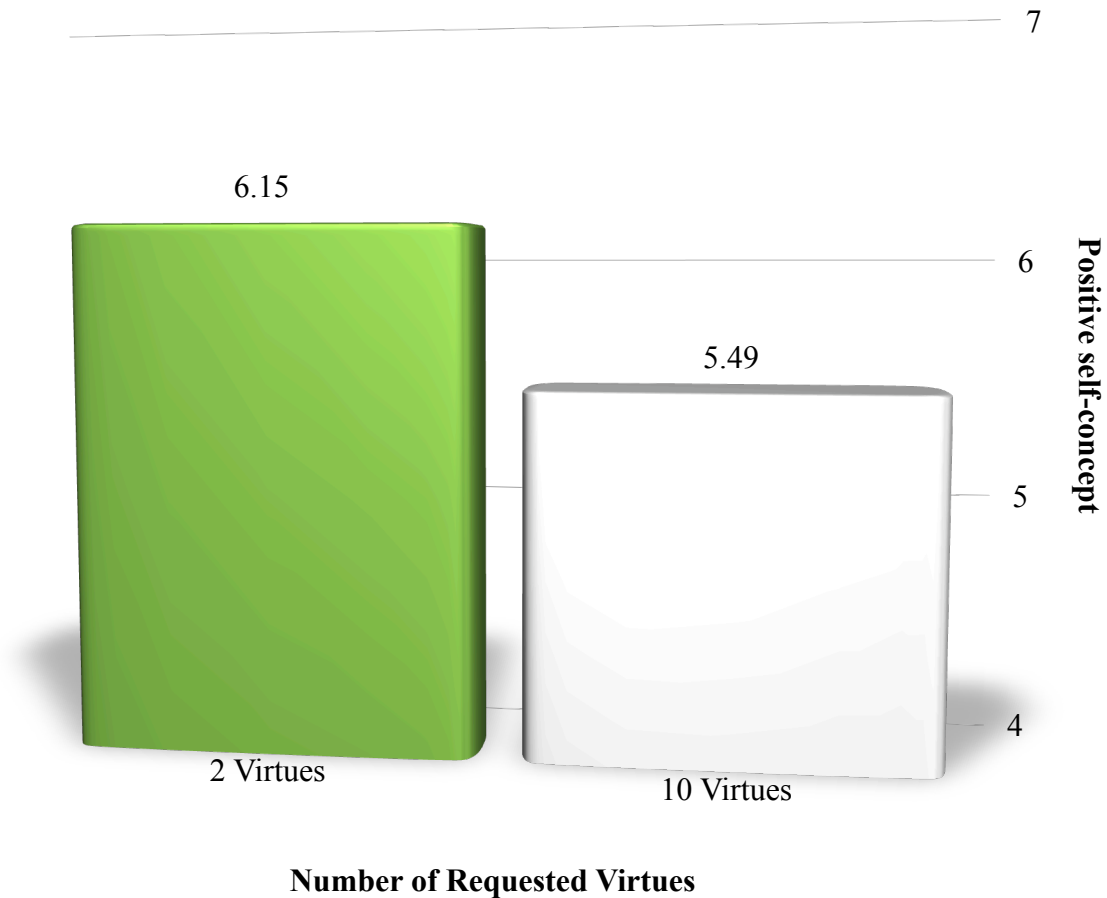
Effect of Recall of Virtues on Self-Indulgent Preferences. Licensing effect was again replicated such that participants reported greater willingness to buy a luxury rather than a necessity after having recalled two virtues ($M = 5.59$, $SD = .87$) than after having recalled 10 ($M = 4.81$, $SD = 1.14$; $t(57) = 2.96$, $p = .004$). Thus, hypothesis 1 was supported.

The Effect of Recall of Virtues on Positive Self-Concept. According to Hypothesis 2a, recall of virtues affects not only self-indulgent preferences, but also positive self-concept. The four items from the self-assessment task were averaged to form positive self-concept scores ($\alpha = .89$). As Figure 2.5 shows, participants assessed themselves more positively after having recalled just

two virtues ($M = 6.15$, $SD = .71$) than after having recalled 10 virtues ($M = 5.49$, $SD = 1.19$; $t(57) = 2.59$, $p = .012$). Consistent with my predictions as well as prior research on licensing, these results suggest that a recall of past virtues affects positive self-concept and does so in the direction consistent with retrieval fluency such that positive self-concept was greater in high fluency condition (easy recall of two virtues) than in the low fluency condition (difficult recall of 10 virtues).

FIGURE 2.5

THE EFFECT OF NUMBER OF REQUESTED VIRTUOUS EXPERIENCES
ON POSITIVE SELF-CONCEPT



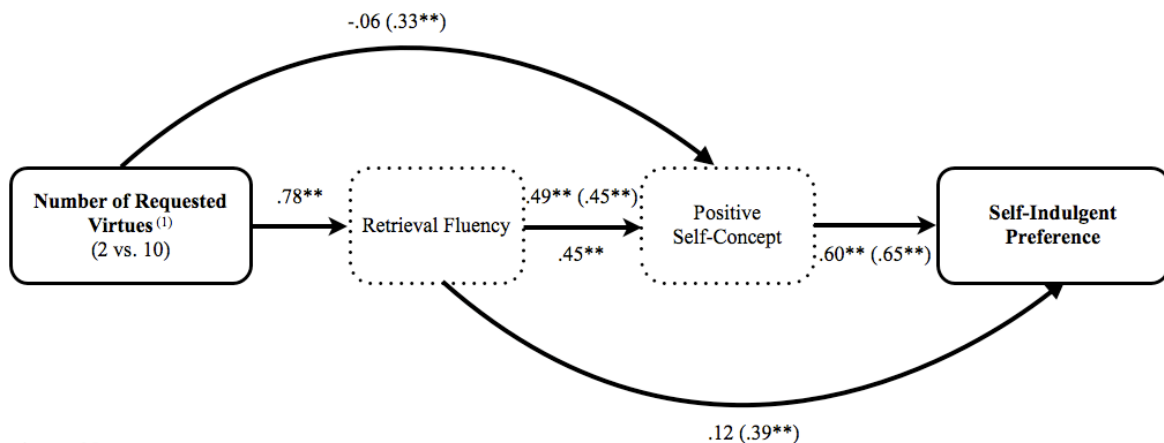
Mediation Analyses. The Hypothesis 2 predicts the mediating effect of retrieval fluency on positive self-concept and the mediating effect of positive self-concept on licensing. In order to tests these predictions, I conducted two mediation analyses, following procedures outlined by Baron and Kenny (1986). Three conditions must hold in order to demonstrate the first mediation effect: (1) independent variable (number of requested virtues) affects the mediator (retrieval fluency); (2) independent variable affects the outcome variable (positive self-concept) in the same way as the mediator; (3) regressing the outcome variable on both the mediator and the independent variable weakens the significant effect of independent variable. A regression with continuous measures of positive self-concept (outcome) and retrieval fluency (mediator), and dummy-coded independent variable of number of requested virtues (0 = 10 virtues, 1 = 2 virtues) were used to test the first mediation effect. Consistent with the preceding analysis, recall of virtuous experiences was correlated with retrieval fluency ($\beta = .78$; $t(57) = 9.25$, $p < .001$) as well as positive self-concept ($\beta = .33$; $t(57) = 2.59$, $p = .012$) such that participants perceived recalling just a few virtues as easier (i.e., higher fluency) and reported greater positive self-concept than when they were asked to recall 10 virtues. When controlling for retrieval fluency, the effect of the recall on positive self-concept weakened to non-significance ($\beta = -.06$; $t(57) = -.31$, *n.s.*) whereas the effect of retrieval fluency remained significant ($\beta = .49$; $t(57) = 2.62$, $p = .011$). Thus, I find support for the mediating effect of retrieval fluency on positive self-concept (Hypothesis 2a), confirming that a recall of past virtues can establish evidence for positive self-concept through reliance on retrieval fluency as an informational input for such self-evaluation.

The second mediation analysis examined how retrieval fluency affects licensing through positive self-concept. Following the same procedures, a regression model with continuous meas-

ures of retrieval fluency (predictor), positive self-concept (mediator), and self-indulgent preferences (outcome variable) were used to test this mediation. As Figure 2.6 illustrates, retrieval fluency was correlated with positive self-concept ($\beta = .45$; $t(57) = 3.80$, $p < .001$) as well as self-indulgent preferences ($\beta = .39$; $t(57) = 3.21$, $p = .002$). However, when controlling for positive self-concept, the effect of retrieval fluency on self-indulgent preferences weakened to non-significance ($\beta = .12$; $t(57) = 1.11$, *n.s.*), whereas the effect of positive self-concept remained significant ($\beta = .60$; $t(57) = 5.30$, $p < .001$). These findings provide support for Hypothesis 2b and thus complete the support for Hypothesis 2. Consistent with my predictions, when participants were asked to recall just a few of virtues, this recall rendered available retrieval fluency with which virtuous experiences came to mind as evidence for positive self-concept which in turn increased self-indulgent preferences.

FIGURE 2.6

THE MEDIATIONS OF RETRIEVAL FLUENCY AND POSITIVE SELF-CONCEPT



* $p < .05$
 ** $p < .01$

(1) Coding: number of requested virtues (0 = 10 virtues, 1 = 2 virtues)

Analysis of Cognitive Responses. The analysis of open-ended responses to the question “Please explain your indicated preference” revealed that participants were not aware of the connection between their choice and fluency experience or self-assessment task. Consistent with previous studies, these results provide further evidence that the fluency-based licensing effect emerges largely outside of people’s awareness.

Discussion

Study 2 replicated the fluency-based licensing effect observed in the previous two studies. More importantly, support was provided for the underlying mechanism of fluency-based licensing effect such that participants formed more favorable judgments about their positive self-concept when they recalled just two virtues in which they previously engaged (high retrieval fluency) than when they recalled 10 virtues (low retrieval fluency). In this view, people license more when recalling fewer virtues. Presumably, thinking about one’s virtuous past is sufficient for licensing when thinking feels easy (i.e., high retrieval fluency) but not when it feels hard (i.e., low retrieval fluency). Interestingly, these findings provide support for the notion that accessing virtues that are already stored in memory can affect how people think of themselves at the moment via fluency-based processing and subsequently influence decisions in domains unrelated to the initial accessibility experience.

The studies presented in the current chapter tested whether recall of virtuous experiences lead to content- or fluency-based licensing effects. Contrary to an intuitive prediction that licensing may increase with increasing number of virtuous experiences, results presented herein provide convergent evidence for the opposite effect. Participants who were asked to recall just a few virtuous experiences were more likely to license than those who recalled a lot of virtuous experi-

ences. Consistent with fluency-based licensing effect, when people recalled just a few past virtues, they established greater evidence for their positive self-concept (e.g., “I am a compassionate and helpful person”) and subsequently were more likely to choose an indulgent option. In this view, people relied on their subjective feelings when forming judgments about their positive self-concept, reporting more favorable evaluations of their present state of the self after having retrieved just a few past virtues than after having recalled a lot of them. In support of this fluency-based mechanism, the last study provided evidence for the mediating effects of retrieval fluency on positive self-concept and its subsequent mediating effect on licensing. In the next chapter, I focus on identifying a boundary condition for the fluency-based licensing effect in order to determine under which condition retrieval fluency does not lead to licensing.

CHAPTER 3

DISCOUNTING CUES AND FLUENCY-BASED LICENSING EFFECT

Imagine that a person is asked to recall just a few virtuous experiences but is subsequently informed that such a recall was very easy as almost anyone with just a little experience with virtuous acts could complete such a recall. Would the fluency-based licensing effect emerge even if a person's attention is drawn to such discounting cues? A considerable amount of research on retrieval fluency experiences shows that when people are provided with a reason that discounts the ease or difficulty of a recall task, people become more reliant on substance of retrieved content, rather than the subjective feelings of fluency (Schwarz and Vaughn 2000). In this chapter, I explore how discounting cues affect the fluency-based licensing effect in order to identify a condition under which fluency with which virtuous experiences are retrieved from memory does not lead to fluency-based licensing.

Herein I will propose that presence of cues that discount the difficulty or ease of a recall task (e.g., lack of virtuous experience) actually reverses the otherwise observed fluency-based licensing effect into a content-based licensing effect. The theory developed and tested in this chapter will show that fluency-based licensing effect emerges only when people are not distracted by cues that discount the informational value of their subjective feelings of ease or difficulty. When people's attention is drawn to discounting cues, they become less reliant on retrieval fluency and, instead, use the substance of retrieved content (i.e., number of retrieved virtuous experiences) as license for self-indulgence. In the following section, I develop and test the theory that supports this reversal effect, including propositions and tests of its underlying process.

THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

The notion that discounting cues can reverse the effect of number of requested virtuous experiences on licensing is based on prior research showing that diagnosticity of subjective experience can be modified by attribution manipulations that discount experienced difficulty or ease, even when people are not aware of the link between subjective state and its impact on subsequent judgment (Schwarz and Clore 1983; Schwarz and Vaughn 2000). What is noteworthy about the role of attributions in the context of retrieval fluency is that they can reverse otherwise observed fluency patterns. A classic demonstration of this reversal is reported by Schwarz and his colleagues (1991) in the context of assertive self-evaluations. In their study (cf. Schwarz et al. 1991, Experiment 3), participants were asked to listen to different types of meditation music and report six or 12 examples of assertive behaviors they previously engaged in. However, some participants were informed that the music facilitated recall of assertive memories whereas other participants were informed that the music did not facilitate such recall. When participants attributed retrieval fluency experienced during recall of assertive behavior to the meditation music (i.e., external attribution), people used retrieved content rather than retrieval fluency, as a primary input for their evaluative judgments, such that they perceived themselves as more assertive when they retrieved more (rather than fewer) examples of their assertive behavior. Similarly, when participants were asked to recall three or nine chronic diseases and then asked to estimate incidence of chronic diseases in population, they were more likely to use retrieval fluency as a primary input for their estimates, but only when they were not aware of their limited expertise in such a

domain (i.e., internal attribution). When aware of such deficiency, they used retrieved content instead (Biller, Bless, and Schwarz 1992).

These and other similar attribution findings (Rothman and Schwarz 1999; Sanna and Schwarz 2003) provide evidence that people draw on retrieval fluency, but only when it is not discounted by attribution manipulations (internal or external). When discounted, people become aware of why a given recall task is easy or difficult and perceive subjective feelings of retrieval fluency as non-diagnostic. As a result, people form their judgments on the basis of retrieved content, such as a number of recalled thoughts. Consistent with this logic, I refer to this type of attributions that provide people with explanation why a given recall task was easy or difficult (e.g., lack of experience or expertise; Biller et al. 1992; Sanna and Schwarz 2003) as *discounting cues*.

In terms of licensing effects, discounting cues will systematically influence whether retrieval fluency is used as a diagnostic input for earning the license to self-indulge. Specifically, when discounting cues are absent, retrieval fluency will serve as an input for licensing such that high retrieval fluency leads to more licensing and low retrieval fluency leads to less licensing. However, a rather different pattern should emerge when discounting cues are present. When people can attribute the ease or difficulty of a recall task to other factors, such as lack of their knowledge or expertise (Sanna and Schwarz 2003), subjective feelings of ease or difficulty will become uninformative and not impact licensing. Instead, retrieved content will become the input for licensing. Licensing then increases not as a result of increased fluency, but rather the increased number of retrieved virtues. In other words, high retrieval fluency leads to less licensing, whereas low retrieval fluency leads to more licensing (i.e., a prediction consistent with content-based licensing), but only when distractors are present. Given that these attributions discount di-

agnosticity of retrieval fluency, discounting cues will serve as a moderator of the relationship between number of requested virtues and licensing. Stated formally:

H5: *When discounting cues are absent (present), fluency-based licensing effect (content-based licensing effect) will result such that people will be more likely to license when asked to recall a small (large) number of virtues than when asked to recall a large (small) number of virtues.*

Embedded in this proposition is the notion that discounting cues determine whether licensing effect emerges as an outcome of processing based on retrieval fluency or substance of retrieved content. In other words, when discounting cues are absent (as was the case in Hypotheses 1-2), likelihood of licensing increases with increasing fluency with which virtuous experiences are retrieved from memory—retrieval fluency mediates the effect of number of requested virtues on licensing. However, when discounting cues are present and people therefore become aware of the source of subjective feelings of ease or difficulty, they become more reliant on substance of their virtuous experiences. Under such conditions, licensing increases as a function of increasing number of retrieved virtues, rather than retrieval fluency—substance or amount of retrieved content then mediates the effect of number of requested virtues on licensing. Stated more formally:

H6: *When discounting cues are absent (present), retrieval fluency (substance of retrieved content) mediates the effect of requested number of virtues on licensing.*

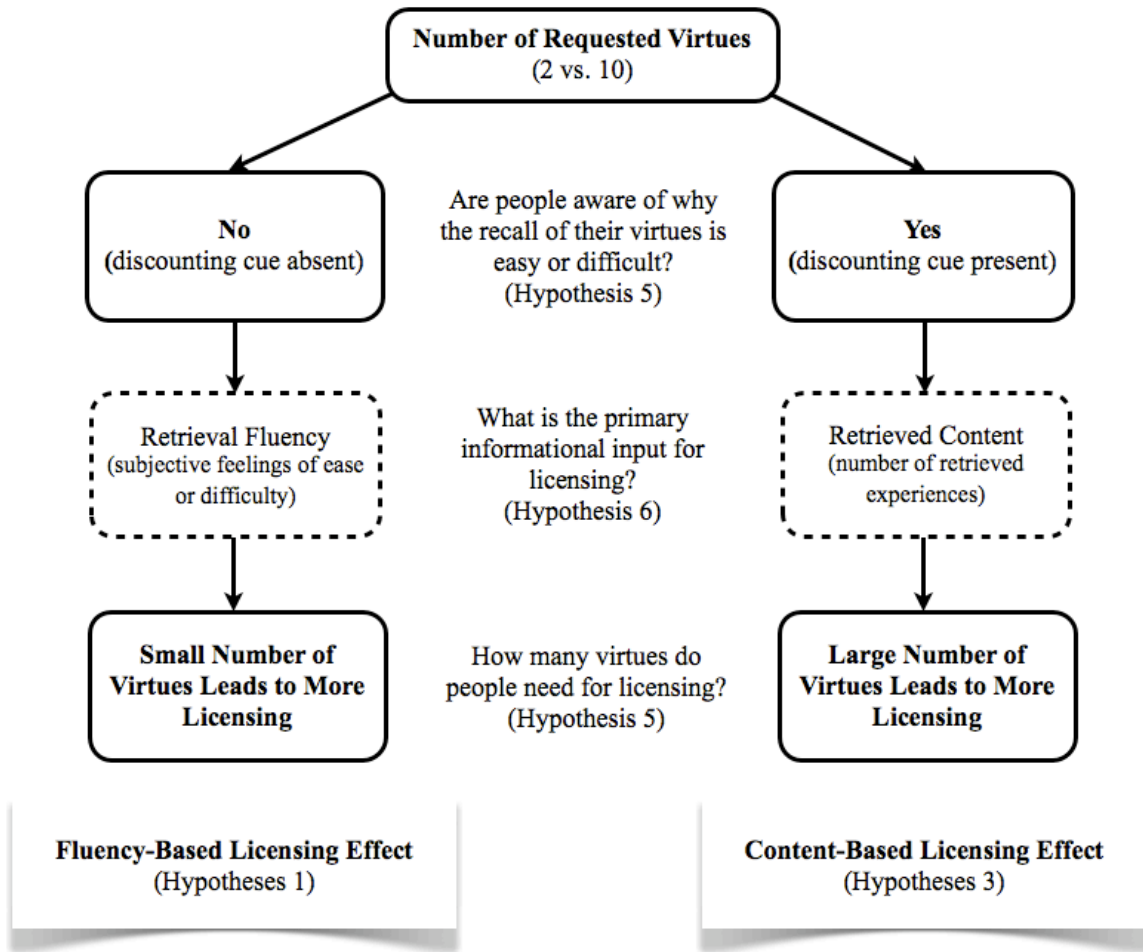
Herein I have advanced the notion that fluency-based licensing effect will be moderated by discounting cues such that presence of such cues reverses the otherwise observed fluency-based pattern into a pattern consistent with content-based licensing effect. In the next section, I present a research design, method, and results of an experiment testing this moderating effect in order to provide empirical evidence for one boundary condition of fluency-based licensing and

one condition under which licensing emerges as a result of substance of retrieved virtuous experiences. The conceptual model developed and tested in this chapter is summarized in Figure 3.1.

FIGURE 3.1

CONCEPTUAL FRAMEWORK DEVELOPED IN CHAPTER 3

AND TESTED IN STUDY 3



RESEARCH DESIGN, METHOD, AND RESULTS

STUDY 3: THE EFFECT OF DISCOUNTING CUES ON FLUENCY-BASED LICENSING EFFECT

As noted earlier, the effect of attributions such as discounting cues on fluency experiences is well-documented in literature, showing that people tend to rely on retrieval fluency only if fluency is not discredited by attribution manipulations. For instance, Biller and his colleagues (1992) asked participants to recall three or nine chronic diseases and then asked them to estimate incidence of chronic diseases in a population. Participants who were asked to recall fewer diseases estimated higher percentage of chronic disease sufferers in a given population. Consistent with retrieval fluency, these participants attributed the perceived ease of retrieval fluency to the high incidence of chronic diseases. However, when participants were provided with knowledge that drew their attention to their lack of expertise (i.e., discounting cue), recalling more diseases lead to higher incidence estimates. In the current study, I use similar type of attribution (e.g., lack of virtuous experience) as a manipulation of discounting cues and test whether presence of such cues reverses the otherwise observed fluency patterns. Study 3 tests this proposition in a context of a choice between two pairs of sunglasses, one of which is presented as more hedonic and expensive (i.e., self-indulgence), and charitable experiences with helping others in community (i.e., virtuous experiences).

Method

Participants and Design. Participants were 115 undergraduate science students (60.9% females, $M_{\text{age}} = 20.37$) volunteering to participate in the study at the end of their class meeting.

The experiment was conducted in a classroom setting as a paper and pencil survey. Groups of up to 25 participants were randomly assigned to one of the four conditions in a 2 (number of requested virtues: 2 vs. 10) x 2 (discounting cues: present vs. absent) between-subjects design study.

Procedures. Participants were randomly assigned to one of the four experimental conditions. As in preceding studies, participants were asked to recall either two or 10 examples of actions in which they volunteered to help others. The attribution manipulation of discounting cues was modeled after methods used by Biller et al. (1992) and Sanna and Schwarz (2003) who also explored the effect of attributions on fluency-based judgments. In their studies, participants' attention was drawn to lack of expertise or experience, respectively. Thus, participants in the discounting cue present condition were exposed to one of the two messages after they completed the recall task. Those who were asked to recall 10 virtues (low retrieval fluency) read the following:

Thank you for listing your experiences. Most previous participants found this task as very difficult to complete since only those with a great experience in volunteering in their communities should be able complete such a task. As background information, may we therefore ask you how experienced are you in volunteering in your community?

Similarly, participants who were asked to recall two virtues (high retrieval fluency) read a similar message but stating that the task was actually easy:

Thank you for listing your experiences. Most previous participants found this task as very easy to complete since anyone with just a little experience in volunteering in their communities should be able complete such a task. As background information, may we therefore ask you how experienced are you in volunteering in your community?

Consistent with Sanna and Schwarz (2003), after participants read this message, they indicated their level of experience on a seven-point scale ranging from “not experienced at all” (1) to “very experienced” (7) to assure participants’ attention to the manipulation. Participants in the discounting cue absent condition did not respond to such a question or read such a message, they only saw “Thank you for listing your experiences” and proceeded directly to the decision task. Following the recall task with or without attribution manipulation, all participants completed the decision task identical to the one used in Study 1a such that participants were asked to imagine that they had received an income tax rebate of \$500 and asked to assume that they had been considering buying a pair of sunglasses for themselves with part of the tax rebate money. Participants were then given a choice between two pairs of sunglasses, one of which was more hedonic and expensive. After having indicated their choice, they responded to an open ended question asking them to share the reasons for their choice. At the last page of the survey, participants responded to manipulation checks and basic demographic questions (gender and age).

Stimuli and Measures

Independent Variables. As in Study 1a and 2, the manipulation of recall of virtuous experiences consisted of asking participants to recall two or 10 experiences with helping others. As described in procedures, the attribution manipulation was modeled after methods used by Biller et al. (1992) and Sanna and Schwarz (2003) and consisted of informing participants that any difficulty or ease encountered during the thought listing task was due to a lack of experience. This manipulation was included in the discounting cue present condition only.

Dependent Variable. The dependent variable was adopted from Study 1. Participants were asked to make a choice between two equally functional pairs of sunglasses that varied on their

hedonic dimension (Italian frames sunglasses for \$110 versus American frames sunglasses for \$50).

Manipulation Check. The manipulation check for number of requested virtuous experiences was again measured by a single item asking participants to rate how difficult it was to generate the requested number of examples on a scale ranging from very difficult (1) to very easy (7). This measure was used as both manipulation check and as a measure of retrieval fluency. Number of listed virtues was counted and then used as a measure of substance of retrieved content. Given that discounting cues were presented across one condition only, if the predicted pattern for the effect of discounting cues is observed, it is accepted as a successful manipulation (e.g., Sanna and Schwarz 2003).

Results

Manipulation Check. A 2 (number of requested virtues) x 2 (discounting cues) analysis of variance on retrieval fluency confirmed that participants perceived remembering examples of their virtuous experiences as easier when asked to recall two virtues ($M = 5.81$, $SD = 1.12$) than when asked to recall 10 experiences ($M = 2.89$, $SD = 1.61$; $F(1, 114) = 132.45$, $p < .001$). The main effect of discounting cues was not significant ($p = .69$). The interaction number of requested virtues x discounting cues was significant ($p = .02$). As subsequent contrasts revealed, participants who were asked to recall 10 virtues perceived the recall task as more difficult when discounting cue was present ($M = 2.55$, $SD = .25$) than when it was absent ($M = 3.25$, $SD = .26$; $F(1, 111) = 3.75$, $p = .055$). Participants evidently adjusted their perceptions consistent with the information provided in the manipulation. This is consistent with prior research on accessibility that has shown that increasing accessibility of information at the time of encoding makes it more

likely that people adjust their judgments according to such information (Feldman and Lynch 1988). Furthermore, an ANOVA on retrieved content showed that participants listed 1.97 (SD = .18) experiences when asked to recall two and 6.00 (SD = 1.94) experiences when asked to recall 10 ($F(1, 114) = 250.17, p < .001$). The main effect of discounting cues was not significant ($p = .33$). Furthermore, the interaction number of requested virtues x discounting cues was not significant ($p = .22$). Together, these results suggest that manipulation of number of requested virtues worked as intended.

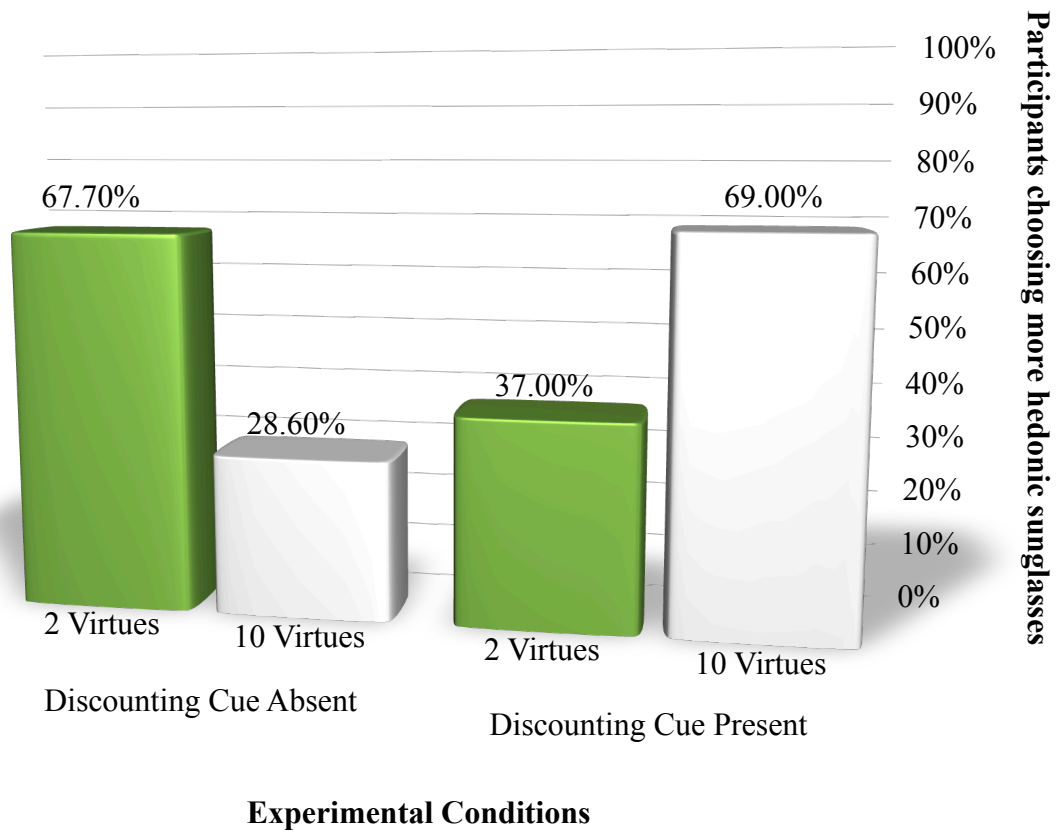
Licensing as a Function of Discounting Cues and Number of Requested Virtues. The current study attempts to test the moderating effect of discounting cues on the relationship between number of requested virtuous experiences and licensing such that a presence of discounting cues will reverse otherwise observed fluency pattern (Hypothesis 5). A logistic regression was used to test this moderating effect. Number of requested virtues (0 = 10 virtues, 1 = 2 virtues) and external attribution (0 = absent, 1 = present) were treated as a two-level categorical variables. The full model then included both categorical variables and the two-way interaction term. The dependent variable was choice of sunglasses (1 = more hedonic and expensive pair, 0 = less hedonic and expensive pair).

The main effect of number of requested virtues was significant ($\beta = 1.66, \text{Wald} = 8.52, p = .004$) as well as the main effect of discounting cues ($\beta = 1.72, \text{Wald} = 8.75, p = .003$). More importantly, these main effects were qualified by a significant two-way interaction ($\beta = -2.99, \text{Wald} = 13.89, p < .001$). Similar to preceding studies, when participants' attention was not drawn to discounting cues, the fluency-based licensing effect was replicated such that 67.70% of participants who recalled two virtues chose a more hedonic and expensive pair of sunglasses but

only 28.60% of participants did so after having recalled 10 virtues ($\chi^2 = 9.03, p = .001$). These findings provide further support for Hypothesis 1 (i.e., fluency-based licensing effect).

FIGURE 3.2

LICENSING AS A FUNCTION OF DISCOUNTING CUES
AND NUMBER OF REQUESTED VIRTUOUS EXPERIENCES



As Figure 3.2 illustrates, however, when participants attributed the ease or difficulty of recall to external factors, the pattern was reversed. When discounting cues were present, only 37.00% of participants who recalled two virtues chose the more hedonic and expensive sunglasses whereas 69.00% of participants who recalled 10 virtues chose the more hedonic and expensive sunglasses ($\chi^2 = 5.73, p = .017$). Thus, I find support for the moderating effect of dis-

counting cues (Hypothesis 5). Indeed, when participants attributed their experience with a recall task to lack of their virtuous experience (i.e., discounting cue), they were more likely to license when recalling a lot of virtues rather than just a few (i.e., a pattern consistent with content-based licensing effect).

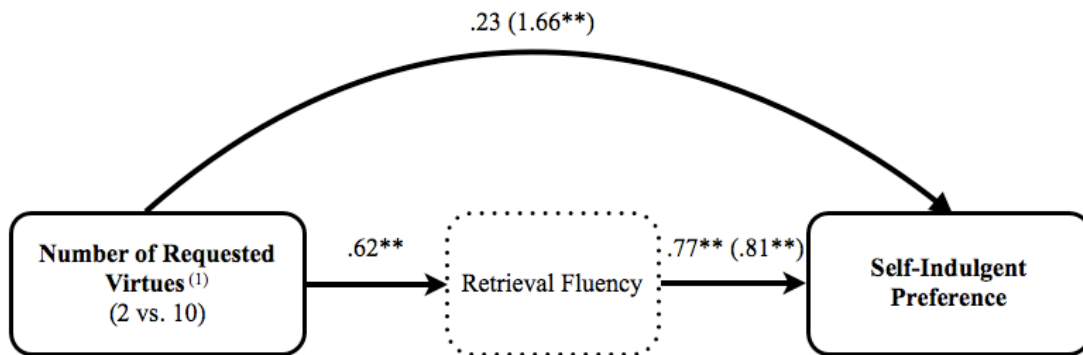
Mediation Analyses. Consistent with prior research, the attribution manipulation (i.e., discounting cues) reversed the otherwise observed effect of retrieval fluency. In this moderating effect, it is assumed that attributions affect the underlying process such that retrieval fluency mediates the effect of recall of virtuous experiences on licensing only when discounting cues are not present. When retrieval fluency operates as the mediator, licensing increases as a function of increasing retrieval fluency. When discounting cues are present, however, people will discount subjective feelings of ease and rely on retrieved content. Under such conditions, retrieved content rather than retrieval fluency will mediate the effect of recall on licensing such that licensing increases as a function of increasing number of recalled virtues (Hypothesis 6). This suggests that the mediating mechanism is contingent on the moderator (discounting cues). Consistent with this prediction, my earlier analysis revealed a significant interaction between the moderator (discounting cues) and the predictor (number of requested virtues) and its impact on the outcome variable (self-indulgent choice). Thus, in order to provide support for the moderated mediation mechanism, I followed procedures outlined by Baron and Kenny (1986) and conducted two separate mediation analyses within each discounting cue condition. Given that the predictor, moderator, and outcome variables are categorical variables and both presumed mediators are continuous measures, Preacher, Rucker, and Hayes (2007) suggest running traditional mediation analyses

following procedures outlined by Baron and Kenny (1986) with the exception of using both regression and logistic regression to conduct mediation tests across both levels of a moderator.

FIGURE 3.3

THE MEDIATION OF RETRIEVAL FLUENCY

ON LICENSING WITHIN DISCOUNTING CUE ABSENT CONDITION



* $p < .05$

** $p < .01$

(1) Coding: number of requested virtues (0 = 10 virtues, 1 = 2 virtues), choice (0 = less indulgent, 1 = more indulgent)

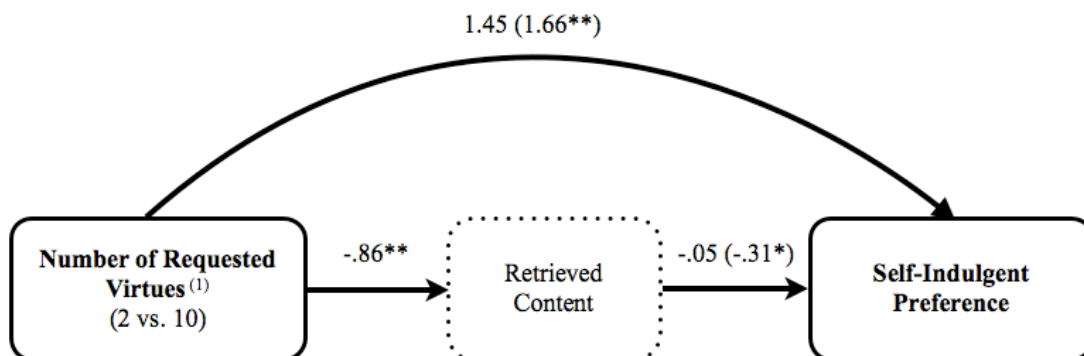
The first analysis was conducted within discounting cue absent condition. The following conditions need to hold: (1) independent variable (number of requested virtues) affects the mediator (retrieval fluency); (2) independent variable affects the outcome variable (self-indulgent choice) in the same way as the mediator; and (3) regressing outcome variable on both mediator and independent variable weakens the significant effect of independent variable. The model used in the first mediation analysis within discounting cue absent condition included the categorical variable of number of requested virtuous experiences (0 = 10 virtues; 1 = 2 virtues), a continuous measure of retrieval fluency (mediator), and the categorical variable of choice (0 = less hedonic option; 1 = more hedonic option). As Figure 3.3 shows, number of requested virtues was corre-

lated with retrieval fluency ($\beta = .62$; $t(57) = 5.90, p < .001$) as well as choice ($\beta = 1.66$; Wald = 8.52, $p = .004$) such that participants experienced a greater retrieval fluency and were more likely to choose a more hedonic option after having recalled two rather than 10 virtuous experiences. However, when controlling for retrieval fluency, the effect of number of requested experiences on choice weakened to non-significance ($\beta = .23$; Wald = .10, *n.s.*) whereas the effect of retrieval fluency remained significant ($\beta = .77$; Wald = 9.93, $p = .002$). No such effect was found for retrieved content as an alternative mediator (see Figure 3.4). These findings provide support that when external attributions are absent (as was the case with studies 1-2), participants use their subjective feelings of retrieval ease rather than retrieved content as a primary input for licensing, in which high fluency leads to more licensing. However, the question is whether retrieved content mediates the effect of number of requested virtues on licensing within discounting cue present condition.

FIGURE 3.4

LACK OF MEDIATION OF RETRIEVED CONTENT

ON LICENSING WITHIN DISCOUNTING CUE ABSENT CONDITION



* $p < .05$

** $p < .01$

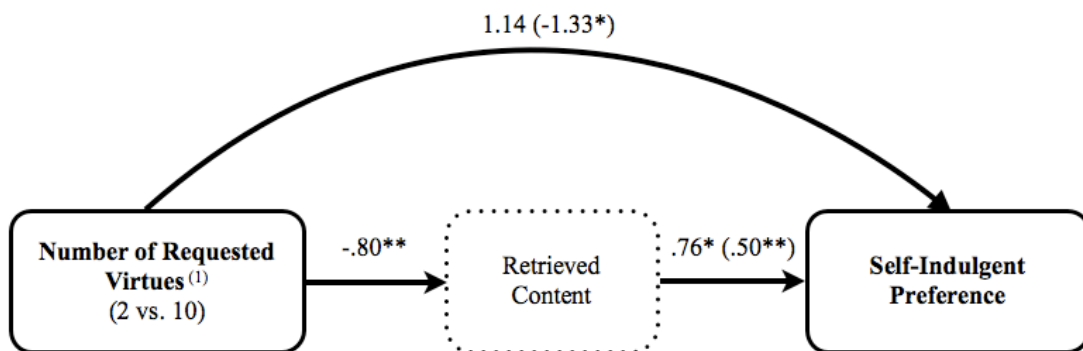
⁽¹⁾ Coding: number of requested virtues (0 = 10 virtues, 1 = 2 virtues), choice (0 = less indulgent, 1 = more indulgent)

The models used in the second analysis within the discounting cue present condition included the categorical variable of number of requested virtuous experiences (0 = 10 virtues; 1 = 2 virtues), a continuous measure of retrieved content (mediator), and the categorical variable of choice (0 = less hedonic option; 1 = more hedonic option). As Figure 3.5 shows, number of requested virtues was correlated with retrieved content ($\beta = -.80$; $t(54) = -9.68, p < .001$) as well as choice ($\beta = -1.33$; Wald = 5.52, $p = .02$). Accordingly, the substance of retrieved material and likelihood of choosing a more hedonic option was greater when participants were asked to recall 10 virtues rather than just two. When controlling for retrieved content, the effect of number of requested virtues on choice weakened to non-significance ($\beta = 1.14$; Wald = .97, *n.s.*) whereas the effect of retrieved content remained significant ($\beta = .76$; Wald = 5.07, $p = .02$). Though similar pattern was found for retrieval fluency as a mediator within the discounting cue present con-

FIGURE 3.5

THE MEDIATION OF RETRIEVED CONTENT

ON LICENSING WITHIN DISCOUNTING CUE PRESENT CONDITION



* $p < .05$
 ** $p < .01$

⁽¹⁾ Coding: number of requested virtues (0 = 10 virtues, 1 = 2 virtues), choice (0 = less indulgent, 1 = more indulgent)

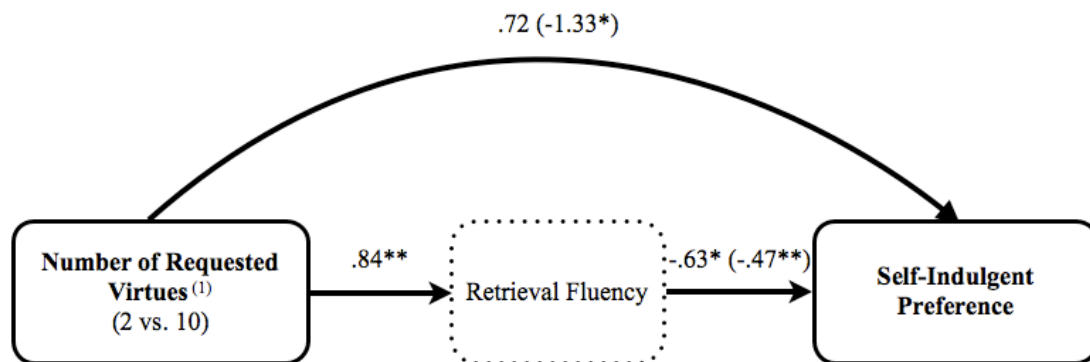
dition (for summary see Figure 3.6), the pattern was opposite to that observed when discounting cue was absent such that licensing increased as a function of decreasing (not increasing) fluency.

Together, these results provide evidence for the moderated mediation mechanism and this support for Hypothesis 6. When people are not provided with discounting cues, people tend to license more the easier the recall feels. Indeed, recalling just a few virtues is all that people need to license when subjective feeling acts as a primary input for licensing. However, when discounting cues are present, the converse effect emerges. Presumably, people discount the diagnostic value of their feelings and, instead, use the substance of retrieved content. In this view, people license more, the more virtues they recall or the harder the recall feels.

FIGURE 3.6

THE MEDIATION OF RETRIEVAL FLUENCY

ON LICENSING WITHIN DISCOUNTING CUE PRESENT CONDITION



* $p < .05$

** $p < .01$

(1) Coding: number of requested virtues (0 = 10 virtues, 1 = 2 virtues), choice (0 = less indulgent, 1 = more indulgent)

Analysis of Cognitive Responses. Consistent with previous studies, analysis of cognitive responses did not reveal any indications of participants' awareness of the effect of a recall task and/or external attributions on licensing choice. Thus, Study 4 provides evidence that both fluency-based and content-based licensing effects are very likely to occur outside of people's awareness.

Discussion

The results presented in the current study provide further evidence for the fluency-based licensing effect (Hypothesis 1) but only when people weren't provided with discounting cues that provided them with explanation why a give recall was easy or difficult. When people became aware of the source of recall difficulty or ease, however, people relied on retrieved content as a primary input for licensing rather than retrieval fluency and therefore licensed more when they recalled many (rather than just a few) virtuous experiences (i.e., content-based licensing effect; Hypothesis 3). Presumably, presence of discounting cues renders fluency feelings uninformative, making people reliant more on the substance of their virtuous experience. In support of these predictions, the current study provided evidence for the moderating effect of discounting cues on the relationship between number of requested virtues and licensing (Hypothesis 5), including its underlying process (Hypothesis 6).

The next two chapters further build on the theories and results presented in Chapters 2 and 3 but focus on the next set of research questions in which the principle interest is on understanding whether other positive experiences (i.e., sacrosanct experiences portraying the self as moral, lovable, and capable) lead to licensing and what consumers are more versus less susceptible to these licensing effects.

CHAPTER FOUR

LICENSING AND RECALL OF SACROSANCT EXPERIENCES

Once again, imagine that a person walks into a grocery store to buy a snack and notices a sign asking “Can you remember your last personal accomplishments that made you proud of yourself?” If the person processes this message and thinks about his or her past personal accomplishments, will it impact what is selected for a snack? Is it possible that virtues are not the only source of positive self-concept and that thinking about other positive experiences such as personal accomplishments can also systematically shift preferences among choices in an unrelated domain? In preceding chapters, I focused on how recalling past virtuous experiences (e.g., pro-social or proenvironmental behaviors) can serve as licenses for self-indulgent choices. In this view, recall of past virtues provides evidence for a positive self-concept and leads to increased likelihood of choosing more self-indulgent options. However, virtues may not be the only source of a positive self-concept. Indeed, positive self-concept can be construed on the basis of a potentially wide array of positive beliefs about oneself as a good individual (Baumeister 1999). Recently, Dunning (2007) advanced the notion that positive beliefs that portray the self as one that is moral, lovable, or capable (i.e., sacrosanct beliefs) are all an important source of positive self-concept and are likely to affect consumer behavior as well. The author, however, has also suggested that the impact of these positive beliefs on behavior may depend on whether the self is viewed as more distinct and independent from others or as a less distinct and more interdependent with others. In other words, the effect of sacrosanct beliefs on one’s behavior may be a func-

tion of what matters to the self in terms of its self-construal (independent versus interdependent self-construal; Markus and Kitayama 1991; Singelis 1994).

In the following section, I advance the notion that sacrosanct experiences that portray the self as a moral, lovable, and capable individual may also represent a source of a positive self-concept and may work as licenses for self-indulgent consumption. By integrating literature on the role of self-construal and information accessibility in consumer decision making, I will argue that recall of sacrosanct experiences can render likely two distinctly different processes, each requiring a retrieval of a different number of sacrosanct experiences and each leading to licensing effects in which past sacrosanct experiences are used as licenses for self-indulgent choices. Because each construal is associated with different values that vary in terms of independence (i.e., considering self as unique and distinct from others) and interdependence (i.e., perceiving self as connected with others; Markus and Kitayama 1991; Singelis 1994), I will argue that what determines which process is engaged depends on the type of sacrosanct experience (e.g., self-centered experiences portraying actions that benefit primarily the individual self versus other-centered experiences portraying actions that benefit primarily those external to the self) and its compatibility with self-construal (i.e., its importance to one's self-concept). In this view, compatibility between a specific sacrosanct belief and self-construal is likely to affect the accessibility of these experiences in memory and determines whether recall of past sacrosanct experiences leads to fluency- or content-based licensing effects. In the section that follows, I integrate research on self-construal (e.g., Aaker and Lee 2001) and information accessibility (Tybout et al. 2005) and develop the theory and empirical tests that support these propositions.

THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

As noted in the preceding section, a positive self-concept is construed on the basis of positive beliefs about oneself (Baumeister 1999). Social psychologists have devoted considerable attention to uncovering the various means people use to generate a positive self-concept (e.g., Haddock 2004; Ross and Wilson 2000, 2002; Wilson and Ross 2000, 2001). One recently identified system is based on sacrosanct beliefs. *Sacrosanct beliefs* represent a set of positive beliefs that claim the self to be moral, lovable, and capable (Dunning 2007). From this sacrosanct perspective, virtues represent only a moral subset of these beliefs, leaving others out. However, the impact of these sacrosanct beliefs on consumer behavior is likely to vary on how important or relevant a given belief is to oneself (Balcetis and Dunning 2006, 2007; Dunning 2007). An important variable that enables to classify sacrosanct beliefs according to their self-concept relevance and examine their impact on behavior is self-construal—that is, how people perceive themselves in relation to other people (independent versus interdependent; Markus and Kitayama 1991). In the subsequent section, I first delineate the implications of self-construal on classification of sacrosanct experiences as those benefiting the self (i.e., self-centered) or those external to the self (i.e., other-centered) and then develop the theory supporting whether recall of sacrosanct experiences leads to fluency- or content-based licensing effects.

Self- and Other-Centered Sacrosanct Experiences

As alluded to earlier, *self-construal* refers to how people perceive themselves in relation to other people (independent versus interdependent; Markus and Kitayama 1991). People with an independent self-construal see themselves as autonomous and distinct from others and tend to strive for uniqueness, individual accomplishment, and achievement. In contrast, people with an

interdependent self-construal place less value on these unique aspects of the self and instead emphasize the self as connected to others in a network of social relationships. These individuals tend to strive for safety, security, and fulfilling the responsibilities and obligations of a society (Markus and Kitayama 1991; Singelis 1994). Building on these distinctly different set of values that matter to individuals with different self-construal, it is possible to categorize sacrosanct beliefs as either those that benefit primarily the self (i.e., self-centered) and those that benefit those external to the self (i.e., other-centered; Aaker and Williams 1998).

In general, beliefs portraying the self as moral or virtuous highlight qualities considered good, right, or acceptable in a particular society such as helping others or the environment. These beliefs are often represented by actions that provide benefits to others rather than the self and can therefore be viewed as more other-centered and less self-centered sacrosanct beliefs. In contrast, capable beliefs tend to highlight personal ability to achieve and accomplish whatever one has to do such as success at work or school. Lovable beliefs refer to deserving love or affection for one's self and as such surround being popular and likable. As such, experiences or actions portraying these two classes of beliefs tend to provide benefits primarily to the self and can therefore be viewed as more self-centered than other-centered sacrosanct experiences. Although one may argue that both types of experiences may also benefit others (e.g., being capable in helping others or being lovable for one's kind actions), for the sake of current research, I limit the scope of these experiences to domains in which a given action benefits clearly the self or others. Consistent with prior work in this domain (e.g., Aaker and Williams 1998), I then define *self-centered sacrosanct experiences* as those portraying actions (i.e., experiences) benefiting primarily the self such as those associated with lovable and capable beliefs. Conversely, *other-centered sacrosanct*

experiences are those portraying experiences benefiting primarily those external to the self (e.g., others, society, environment), such as those associated with moral or virtuous self-beliefs. In next section, I develop the theory delineating how these two different types of sacrosanct experiences affect the relationship between recall of sacrosanct experiences and licensing.

Type of Sacrosanct Experience and Licensing

According to the literature on self-construal, when development of a particular self-construal is encouraged by a society, it becomes chronically accessible at the individual level. A considerable amount of research has shown that independent self-construals tend to be nurtured in individualistic cultures (e.g., North America, Western Europe), whereas interdependent is nurtured in more collectivist cultures (e.g., Asia, Eastern Europe; Oyserman, Coon, and Kemmelmeier 2002; Singelis 1994). It is also well documented that people in individualistic societies (e.g., United States) hold both self-construals, but the independent self-construal is the one that tends to be more chronically accessible, activated most often, and thus more likely to guide behavior (Trafimow, Triandis, and Goto 1991; Zhang and Shrum 2009). Given that the primary focus of my research is on consumers in the United States (i.e., individualistic culture), the characteristics associated with independent dimension of a self-concept may have important implications for how consumers in the United States respond to a recall of different types of sacrosanct experiences. Thus, in my initial theorizing, I focus on the implications drawn from the characteristics of independent self-construals for the herein examined licensing effects based on recall of self- and other-centered sacrosanct experiences.

Prior research has shown that people with independent self-construal who adhere to more individualistic views of the world and see themselves as distinct from others, are likely to per-

ceive actions framed as those benefiting the self (i.e., self-centered) as more central to their self-concept than actions framed as benefiting those external to the self (i.e., other-centered; Aaker and Williams 1998). In this view, increasing the compatibility between the content of a task and what matters to the self, increases the relevance of a task and impacts how a task is processed (Aaker and Lee 2001; Lee, Aaker, and Gardner 2000). For example, participants with assumed independent self-construal (e.g., white American students) perceived scenarios emphasizing individual success or achievement (e.g., winning) as more important than scenarios emphasizing responsibility (e.g., reducing risk of heart disease). Presumably, the compatibility of a task with self-construal not only enhanced the relevance of the task but also influenced processing strategies, such that greater compatibility lead to increased reliance on central processing whereas smaller compatibility lead to increased reliance on heuristic processing (Aaker and Lee 2001).

Research findings that compatibility between a task and self-construal affects the relevance of a task, and processing has important implications for how consumers in the United States (i.e., those with assumed independent self-construal) will process recall of self- and other-centered sacrosanct experiences. In the context of information accessibility, task-relevant knowledge tends to be more accessible in domains that people perceive as more relevant and less accessible in domains viewed as less relevant to the self (Tybout et al. 2005). As noted by Schwarz (1998), the less relevant and involving the task is, the more likely people are to adopt a heuristic processing strategy, paying less attention to the specific implications of the information that comes to mind but more attention to subjective feelings that come to a mind. When a task is more relevant, however, people are likely to adopt a central processing strategy, paying more attention to the specific implications of the information that comes to mind and with less attention

paid to subjective feelings that come to a mind. For example, when participants were asked to recall either three or eight behaviors that increased their personal risk of heart disease, participants perceived themselves as more vulnerable to heart disease after having recalled only three behaviors but only when they did not have family history of heart disease. These participants used retrieval fluency as inputs for their judgments. In contrast, participants with a family history of heart disease perceived themselves as more vulnerable to heart disease after having recalled eight behaviors, using retrieved content as inputs for their judgment. Presumably, people with a family history perceived the recall task as more relevant than those without such history (Grayson and Schwarz 1999; Rothman and Schwarz 1998), leading to results similar to those reported across construal-compatible tasks (Aaker and Lee 2001; Lee et al. 2000).

These findings provide evidence that increasing compatibility between a task and construal is likely to be associated with higher accessibility of task-relevant knowledge and reliance on retrieved content whereas decreasing compatibility is likely to be associated with lower accessibility and reliance on retrieval fluency. Consistent with this logic, the type of sacrosanct experience (self- versus other-centered) may determine whether recall of sacrosanct experiences leads to fluency- or content-based licensing effects. Given that principle focus of my empirical inquiry is on consumers with assumed independent self-construal (i.e., member of individualistic culture), sacrosanct experience that are highly compatible with an independent construal (other-centered), the task-relevant information may be more accessible and people will rely on the substance of retrieved content as an evidence for their positive self-concept and as a license to self-indulge. Accordingly, people will experience a greater positive self-concept and be more likely to license after having retrieved a lot of past self-centered sacrosanct experiences (e.g., personal

success or achievements) rather than just a few of them (content-based licensing effect). Conversely, when sacrosanct experience are less compatible with an independent construal (other-centered), the task-relevant information may be less accessible and people will be more to rely on retrieval fluency. People then evaluate their self-concept more positively and be more likely to license after having recalled just a few other-centered sacrosanct experiences (e.g., charitable behaviors) rather than a lot. In this view, people license by establishing evidence for their positive self using their subjective feelings rather than the substance of retrieved information (fluency-based licensing effect). This theorizing suggest that the type of sacrosanct experience (self- versus other-centered) will moderate the effect of number of requested sacrosanct experiences on both positive self-concept and licensing. Stated formally:

H7: *The effect of requested number of sacrosanct experiences on positive self-concept (7a) and licensing (7b) will be moderated by the type of sacrosanct experience such that:*

H7a: *When people are asked to recall other-centered (self-centered) sacrosanct experience, fluency-based (content-based) processing will result such that people will experience a more positive self-concept when asked to recall a small (large) number of sacrosanct experiences than when asked to recall a large (small) number of sacrosanct experiences.*

H7b: *When people are asked to recall other-centered (self-centered) sacrosanct experience, fluency-based (content-based) licensing effect will result such that people will be more likely to license when asked to recall a small (large) number of sacrosanct experiences than when asked to recall a large (small) number of sacrosanct experiences.*

Similar to my earlier prediction regarding the role of attributions in which discounting cues moderated the effect of a recall of virtuous experiences on licensing, embedded in the current proposition is the notion that the type of sacrosanct experience determines whether positive self-concept and licensing effects emerges as an outcome of processing based on retrieval flu-

ency or substance of retrieved content. In other words, when recalling other-centered sacrosanct experiences (as was the case in Chapters 1 and 2), positive self-concept boost and likelihood of licensing increase with increasing fluency with which sacrosanct experiences are retrieved from memory—retrieval fluency mediates the effect of number of requested sacrosanct experiences on positive self-concept and licensing. However, when people are asked to recall their self-centered sacrosanct experiences, people are more reliant on the substance of their virtuous experiences. Under such conditions, positive self-concept and licensing increase as a function of increasing number of retrieved sacrosanct experiences, rather than retrieval fluency—substance or amount of retrieved content then mediates the effect of number of requested experiences on positive self-concept and licensing. Stated more formally:

H8: *When recalling other-centered (self-centered) sacrosanct experiences, retrieval fluency (substance of retrieved content) mediates the effect of requested number of sacrosanct experiences on (a) positive self-concept and (b) licensing.*

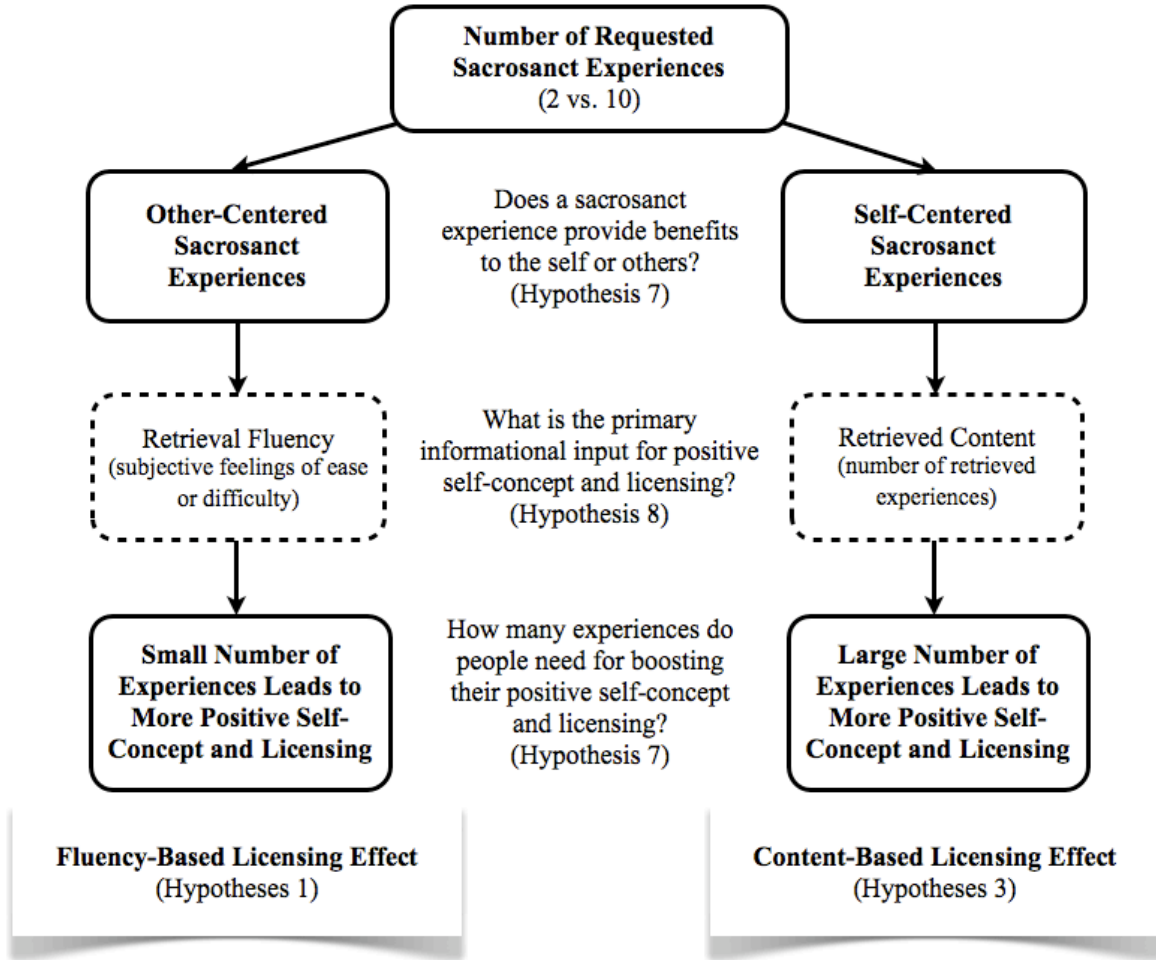
In this section, I proposed that sacrosanct experiences can be classified into two broad types: *self-centered sacrosanct experiences*, portraying actions that benefit primarily the individual self such as lovable (funny or entertaining) and capable (personal achievement and success); and *other-centered sacrosanct experiences*, portraying actions that benefit primarily those external to the self as virtuous (charitable or environmentally responsible). In this view, sacrosanct experiences that are more (versus less) compatible with individual's self-construal are also assumed to be more (versus less) accessible. Given that the primary focus of my research is on American consumers whose self-concept is assumed to be construed around independence rather than interdependence (e.g., Aaker and Lee 2001; Aaker and Williams 1998), I then presented theory supporting the notion that a type of a sacrosanct experiences people are asked to access in

their memory determined whether positive self-concept and licensing emerges via fluency- or content-based processing. Specifically, when people are asked to recall self-centered sacrosanct experiences (more compatible with assumed independent self-construal), people evaluate their positive self-concept more favorably and are more likely to license after having recalled a lot of experiences. Thereby, licensing increases as a function of increasing number of recalled experiences, that is, substance of retrieved content (content-based licensing effect). A reverse effect emerges when people are asked to recall other-centered sacrosanct experiences (less compatible). When recalling such experiences, people evaluate their positive self-concept more favorably and are more likely to license after having recalled just a few experiences. Licensing then increases as a function of increasing fluency with which people access their experiences—that is, the subjective feelings of ease or difficulty experienced during recall (fluency-based licensing effect). In the section that follows, I present research designs, methods, and results of two experiments providing empirical support for propositions developed in the current chapter. The conceptual model developed and tested in this chapter is then summarized in Figure 4.1.

FIGURE 4.1

CONCEPTUAL FRAMEWORK DEVELOPED IN CHAPTER 4

AND TESTED IN STUDIES 4A AND 4B



RESEARCH DESIGNS, METHODOLOGY, AND RESULTS

PRETESTS: IDENTIFYING SELF- AND OTHER-CENTERED SACROSANCT EXPERIENCES

In general, sacrosanct beliefs are those that represent something desirable in a person such as portraying that the self is moral, lovable, or capable (Dunning 2007). All of these positive self-beliefs are considered potential sources of positive self-concept and were previously theoretically classified as either other-centered (e.g., virtuous or moral) or self-centered self-beliefs (e.g., lovable, capable). The goal of following pretests is to provide support for this classification as well as their relevance to a self-concept to individuals with assumed independent self-construal (e.g., American students; Aaker and Lee 2001; Aaker and Williams 1998; Zhang and Shrum 2009).

TABLE 4.1

RESULTS OF CODING OF SACROSANCT BELIEFS (PRETEST 1)

Experiences	Belief	Type	%
Helping others, including volunteering	Moral	Other	60.00%
Environmental responsibility	Moral	Other	40.00%
Donating to charities and non-profits	Moral	Other	33.33%
Honest with others	Moral and lovable	Other+ego	61.67%
Success at school, work, or sports	Capable	Ego	58.33%
Intelligent and knowledgeable	Capable	Ego	35.00%
Kind to others	Lovable and moral	Ego+other	50.00%
Funny and entertaining	Lovable	Ego	43.33%
Caring and loving	Lovable and moral	Ego+other	53.33%

Note: The table reviews only those experiences that were listed by more than 30% of participants.

In the first pretest (N = 60), participants were U.S. undergraduate marketing students who completed a short online survey as a part of a larger data-collection effort. In the survey, participants were provided with short description of what sacrosanct beliefs are and then provided with a short definition of each sacrosanct belief (moral, lovable, capable). Participants were then asked to list experiences or actions that made them feel lovable, moral, or capable. The responses were then coded by the author as self- or other-centered or mixed (i.e., having attributes of both). Specifically, the responses were coded as follows: (1) when a listed experience represented actions that provide benefits predominantly to the self (e.g., “earning a reward for good work,” “getting a good grade,” “being perceived as a funny person”), the experience was coded as self-centered; (2) when a listed experience represented actions that provide benefits predominantly to those external to the self (e.g., “helping my grandparents to maintain their yard,” “helping with food drives,” “walking instead of driving to avoid pollution”), the experience was coded as other-centered; (3) when a listed experience represented actions that provide benefits to both the self and others (e.g., “acting in honest ways,” “kindness to others”), the experience was coded as mixed. The results of this coding scheme are reviewed in table 4.1. Appendix D contains materials used in this pretest.

The results of this pretest confirmed that experiences related to helping others, acting in environmentally responsible ways, or donating to charities were all perceived as a part of moral sacrosanct beliefs (other-centered). Furthermore, over 40% of participants perceived experiences related to being funny or entertaining as a part of lovable sacrosanct beliefs and experiences related to being successful or intelligent as a part of capable sacrosanct beliefs (self-centered).

Based on these results, ‘funny’ and ‘successful’ were categorized as distinctly self-centered sacrosanct experiences and ‘helpful’ and ‘environmentally’ responsible as other-centered sacrosanct experiences (i.e., virtues).

In the second pretest (N = 176), participants were again U.S. undergraduate marketing students who completed an online questionnaire as a part of larger data collection and received course credit for their participation. The primary objective of this pretest was to determine whether the experiences identified in Pretest 1 vary in their importance to a self-concept in ways consistent with the assumption that participants are more likely to be of an independent self-construal. In the survey, participants indicated self-concept relevance of each of the four beliefs chosen on the basis of the first pretest, using two items on a seven-point scale (1-not important to me at all/7-very important to me; 1-not central to my self-concept/7-central to my self-concept). These items were adopted from Schwartz Value Survey (Schwartz 1994) but modified for the purposes of this research. Specifically, participants evaluated self-concept relevance for the following beliefs:

Sense of success and accomplishment: *Being accomplished at school/work; setting and striving to reach for goals; a need to get things done and be successful.*

Environmental responsibility: *A concern for environmental problems; effort to minimize environmental footprint; conserving energy, recycling, minimizing resource waste, etc.*

Charitableness: *Volunteering in your community; working for the welfare of others; helping people in need; being generous to others.*

Funny and entertaining: *Making others laugh; entertaining friends and family.*

Consistent with my expectations, participants considered self-centered experiences representing success and accomplishment ($M = 5.94$, $SD = .98$) as more important to their self-concept than experiences representing either environmental responsibility ($M = 4.40$, $SD = 1.24$, $t(175) = 13.97$, $p < .001$) or charitableness ($M = 4.60$, $SD = 1.26$, $t(175) = 12.12$, $p < .001$). Similarly, participants considered experiences representing funny and entertaining ($M = 5.20$, $SD = 1.15$) as more important to their self-concept than experiences representing either environmental responsibility ($M = 4.40$, $SD = 1.24$, $t(175) = 6.94$, $p < .001$) or charitableness ($M = 4.60$, $SD = 1.26$, $t(175) = 5.23$, $p < .001$). Notably, all means were above mid-point of a seven-point scale (4), indicating that other-centered experiences, though less important or relevant to self-concept than self-centered, were still moderately important to participants' self-concept. Correlations among individual experiences were significant (Table 4.2), confirming that each of these experiences portrays something that is positively correlated with individual's self-concept. The results of this pretest confirm that self-centered experiences such as those related to being funny (lovable) and successful (capable) are considered, relative to other-centered experiences, as more

TABLE 4.2

CORRELATIONS AMONG SACROSANCT EXPERIENCES (PRETEST 2)

	SA	ER	CH	FE
Sense of success and accomplishment (SA)	X	.150 (.05)	.16 (.03)	.17 (.03)
Environmental responsibility (ER)		X	.31 (.01)	.17 (.02)
Charitableness (CH)			X	.20 (.01)
Funny and entertaining (FE)				X

Note: Results reported for Pearson's correlations, p -values are stated in parenthesis.

relevant to the self-concept of individuals with presumed chronically-accessible independent self-construal.

STUDY 4A: POSITIVE SELF-CONCEPT AS A FUNCTION OF NUMBER OF REQUESTED EXPERIENCES AND TYPE OF SACROSANCT EXPERIENCE

The preceding pretests established evidence that self-centered sacrosanct experiences were viewed as more important to a self-concept of individuals with assumed independent self-construal (more construal-compatible) than other-centered sacrosanct experiences. Present study focuses on examining the effect of these two types of sacrosanct experience (self- versus other-centered) on the relationship between number of requested sacrosanct experiences and positive self-concept (Hypothesis 7a). In addition, it examines the underlying mechanisms accompanying the recall of self- and other-centered sacrosanct experiences. Specifically, it tests whether the type of sacrosanct experiences people are asked to recall determines whether recall leads to fluency- or content-based changes in positive self-concept (Hypothesis 8a).

Method

Participants and Design. Participants receiving course credit were 92 U.S. students enrolled in an online business courses (41.3% females, $M_{age} = 25.13$). Participants completed the study online at their own pace and location. Participants were randomly assigned to one of the four conditions in 2 (number of requested experiences: 2 vs. 10) x 2 (type of sacrosanct experience: self- vs. other-centered) between subjects design.

Procedures. In the study, participants were asked to recall either two or 10 examples of sacrosanct experiences. Participants assigned to self-centered condition were asked to recall ex-

amples of actions in which they made someone laugh (funny as a part of lovable beliefs) whereas those assigned to other-centered condition were asked to recall examples of actions in which they volunteered to help someone in their community (helpful as a part of virtuous or moral beliefs). Following this recall task, participants proceeded to an ostensibly unrelated self-assessment task introduced as a separate part of the survey which was similar to the one used in Study 2. In this survey, participants were asked to indicate the extent to which they agreed or disagreed with eight self-assessment statements, including four items measuring positive self-concept related to either other- or self-centered dimensions of the self. At the end of the survey, participants completed a short mood scale, manipulation checks for recall and type of sacrosanct experience. Participants then responded to basic demographic questions and were debriefed via an online statement.

Stimuli and Measures

Independent Variables. Recall was manipulated by asking participants to retrieve either two or 10 examples of their sacrosanct experiences. The type of sacrosanct experience was manipulated by asking participants to remember examples of actions in which they made someone laugh (self-centered) or volunteered to help others in their community (other-centered).

Dependent Measure. The dependent measure was a measure of positive self-concept. Similar to Study 2, positive self-concept was measured using a self-assessment task in which participants evaluated themselves on personality traits that were likely to be relevant to being either virtuous or moral or lovable dimensions of self-concept. This approach is consistent with prior research on social cognition that suggests measuring changes in state self-concept through items adopted from state or situational self-esteem scale (Heatherton and Polivy 1991). Partici-

pants indicated the extent to which they agreed or disagreed with the following eight statements: “I am compassionate,” “I am warm,” “I am helpful,” and “I am sympathetic” as items measuring virtuous or moral dimension of a self-concept and “I am popular,” “I am funny,” “I am likable,” and “I am charming” as items measuring the lovable side of self-concept. All items were collected on a seven-point scale (1-strongly disagree/7-strongly agree). Appendix E shows the scale used in this study.

Mood Measure. In order to rule out the possibility that recall impacts positive self-concept via mood, participants were asked to indicate how they felt at the moment on a two-item, seven-point mood scale (Lee and Sternthal 1999) anchored by “sad/happy” and “depressed/cheerful” (1-most negative/7-most positive).

Manipulation Checks. Recall was measured by a single item asking participants to rate how difficult it was to generate the requested number of examples in the recall task they completed earlier in the online session on a scale ranging from very difficult (1) to very easy (7). This measure was also used as measure of perceived retrieval fluency. Retrieved content was again measured by counting the number of examples participants listed during the recall task. As in Study 5, the manipulation check for the type of sacrosanct experience consisted of a single item asking participants to indicate whether the experiences they listed in the recall task provided benefits to their individual self or others on a seven-point scale ranging from “primarily benefiting others” (1) to “primarily benefiting me” (7).

Results

Manipulation Checks. A 2 (number of requested experiences) x 2 (type of sacrosanct experience) analysis of variance on retrieval fluency confirmed that participants perceived recalling

two examples of their experiences as easier ($M = 5.02$, $SD = 1.25$) than recalling 10 experiences ($M = 2.04$, $SD = 1.20$; $F(1, 91) = 143.37$, $p < .001$). The main effect of type of sacrosanct experience ($p = .09$) and the two-way interaction were not significant ($p = .09$). In addition, a separate ANOVA on retrieved content was also conducted. As expected, participants listed 1.93 ($SD = .33$) experiences when asked to recall two experiences and 5.90 ($SD = 2.27$) experiences when asked to recall 10 experiences ($F(1, 91) = 129.72$, $p < .001$). The main effect of type of sacrosanct experience ($p = .47$) and the interaction term were not significant ($p = .27$). Finally, a separate ANOVA on type of sacrosanct experience confirmed that participants perceived self-centered experiences as more likely to benefit their individual self ($M = 5.48$, $SD = .92$) than other-centered experiences ($M = 3.09$, $SD = 1.05$; $F(1, 91) = 133.69$, $p < .001$). The main effect of number of requested experiences ($p = .21$) and the two-way interaction were not significant ($p = .98$). Overall, all manipulations worked as intended.

Mood. A two-way ANOVA with 2 (number of requested experiences) \times 2 (type of sacrosanct experience) on mood score was conducted, confirming that the manipulated variables of number of requested experiences ($p = .50$) and type of sacrosanct experience ($p = .26$) did not affect mood. The two-way interaction was also not significant ($p = .71$). These results confirm that the manipulations used in the present studies did not change participants' mood.

Positive Self-Concept as a Function of Number of Requested Experiences and Type of Sacrosanct Experience. Consistent with prior research on licensing (Khan and Dhar 2006) as well as research on active self-concept (Wheeler et al. 2007), recall of self- or other-centered sacrosanct experiences should activate a task-relevant dimension of a self-concept. As in Study 2, recall of virtuous experiences (other-centered) should lead to activation of virtuous part of a self-

concept. By contrast, recall of lovable experiences (self-centered) should activate lovable side of the self-concept, rather than virtuous side of self-concept (e.g., Wheeler et al. 2007). Accordingly, I calculated two separate self-concept indexes. The four items from the self-assessments measuring virtuous or moral dimension of self-concept were averaged to form virtuous self-concept scores ($\alpha = .85$). The remaining four items measuring lovable side of a self-concept were also averaged to form lovable self-concept scores ($\alpha = .84$). In the following section, I then test Number of Requested Experiences x Type of Sacrosanct Experience interaction using each of these scores as dependent measures to provide support for Hypotheses 7a and 8a. In the following analyses, I first focus on the aforementioned interaction effect on virtuous self-concept and then lovable self-concept.

According to hypothesis 7a, recall of other-centered sacrosanct experiences will lead to more positive self-evaluations when recalling just two rather than 10 sacrosanct experiences. A 2 (number of requested experiences) x 2 (type of sacrosanct experience) ANOVA was conducted, using virtuous self-concept index as the dependent measure. This analysis revealed a main effect of number of requested experiences such that participants rated themselves more positively when recalling just two experiences ($M = 5.23$, $SD = .91$) than when recalling 10 experiences ($M = 4.41$, $SD = .92$; $F(1, 91) = 27.73$, $p < .001$). The main effect of type of sacrosanct experience was not significant ($p = .26$). More importantly, however, the interaction between the number of requested experiences and type of sacrosanct experience was significant ($F(1, 91) = 32.93$, $p < .001$), revealing that when participants were asked to recall their other-centered experiences (virtues), they rated themselves more positively on the virtuous self-concept dimension when recalling just two virtues ($M = 5.83$, $SD = .62$) than when recalling 10 virtues ($M = 4.01$, $SD = .75$; F

(1, 88) = 58.01, $p < .001$). As Figure 4.2 illustrates, however, the virtuous dimension did not change when recalling self-centered experiences ($p = .73$). These results confirm that recall of other-centered sacrosanct experiences leads to a boost of a virtuous dimensions of a positive self-concept and that such boost is greater when retrieving just a few virtues—a pattern consistent with pervasively examined fluency-based licensing effects.

FIGURE 4.2

VIRTUOUS SELF-CONCEPT AS A FUNCTION OF NUMBER OF REQUESTED EXPERIENCES AND TYPE OF SACROSANCT EXPERIENCE



Experimental Conditions

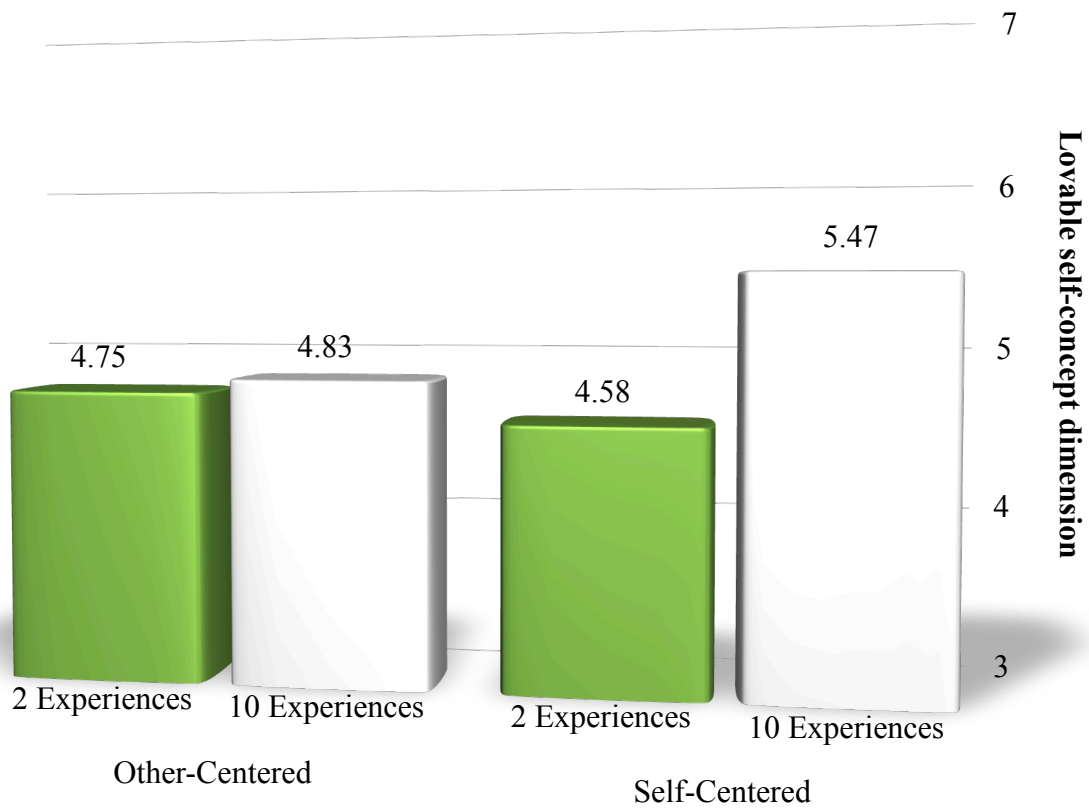
A reverse pattern, however, emerged when the same analysis was conducted using lovable self-concept index as a dependent measure. Hypothesis 7a predicts that recall of self-centered sacrosanct experiences (lovable) leads to more positive self-evaluations when recalling 10 rather than just two sacrosanct experiences. ANOVA with 2 (number of requested experiences) x 2 (type of sacrosanct experience) using lovable self-concept scores as the dependent measure revealed a main effect of number of requested experiences such that participants rated themselves more positively when recalling 10 experiences ($M = 5.16$, $SD = .90$) than when recalling just two experiences ($M = 4.66$, $SD = .84$; $F(1, 91) = 7.42$, $p = .008$). The main effect of type of sacrosanct experience was not significant ($p = .19$). More importantly, however, the interaction between number of requested experiences and type of sacrosanct experience was significant ($F(1, 91) = 5.16$, $p = .025$). When participants were asked to recall their self-centered experiences (lovable), they rated themselves more positively on the lovable self-concept dimension when recalling 10 lovable acts ($M = 5.47$, $SD = .78$) than when recalling just two ($M = 4.58$, $SD = .97$; $F(1, 88) = 13.05$, $p = .001$). As expected, no such difference was observed when participants recalled their other-centered experiences (virtuous). As Figure 4.3 shows, the lovable dimension of positive self-concept did not change as a function of number of recalled experiences ($p = .76$).

Together, these results provide support for hypothesis 7a such that recall of self-centered sacrosanct experiences leads to positive self-concept based on retrieved content (i.e., recalling a large number of sacrosanct experiences leads to greatest positive self-concept) whereas recall

other-centered sacrosanct experiences leads to positive self-concept based on retrieval fluency (i.e., recalling just a few sacrosanct experiences leads to greatest positive self-concept).

FIGURE 4.3

LOVABLE SELF-CONCEPT AS A FUNCTION OF NUMBER OF REQUESTED EXPERIENCES AND TYPE OF SACROSANCT EXPERIENCE



Experimental Conditions

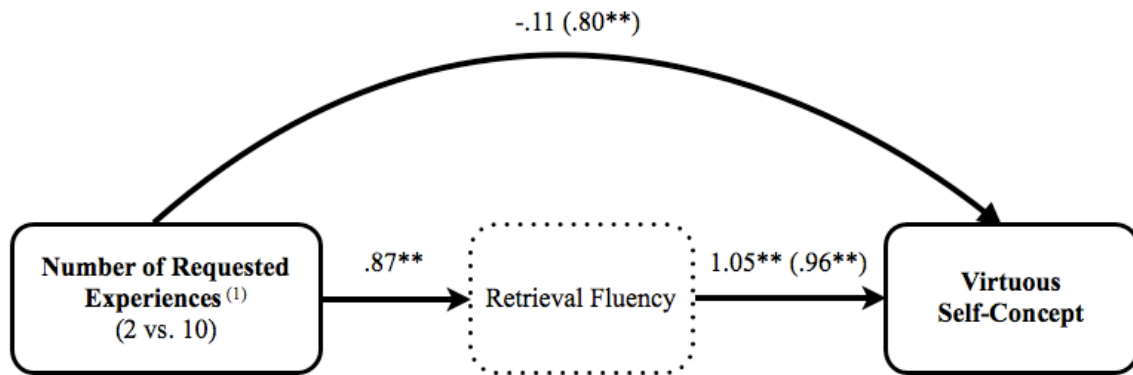
Mediation Analyses. Hypothesis 8a predicts that the effect of recall of self- versus other-centered sacrosanct experiences on positive self-concept dimension is driven by different mediators. That is, mediation effects vary across levels of the moderator (i.e., type of sacrosanct experience). In order to provide support for this moderated mediation, I follow procedures outlined by

Baron and Kenny (1986) and Preacher et al. (2007) in conducting this test. The previous analysis revealed significant interaction between the moderator (type of sacrosanct experience) and the predictor (number of requested experiences) on the outcome variable (self-concept dimension). Thus, I conduct a series of regressions within each type of sacrosanct experience (self- and other-centered) in order to test for the differential mediating mechanisms. In the following sections, I first analyze the results within other-centered sacrosanct experiences and then within self-centered sacrosanct experiences.

Following Baron and Kenny (1986), the following conditions need to hold within other-centered sacrosanct experiences (virtues): (1) independent variable (number of requested experiences) affects the mediator (retrieval fluency); (2) independent variable affects the outcome variable (virtuous self-concept) in the same way as the mediator; and (3) regressing outcome variable on both mediator and independent variable weakens the significant effect of independent variable. The regression included a categorical variable of number of requested experiences (0 = 10 virtues; 1 = 2 virtues), continuous measure of retrieval fluency, and virtuous dimension of positive self-concept. As Figure 4.4 illustrates, number of requested experiences was correlated with retrieval fluency ($\beta = .87$; $t(41) = 11.35$, $p < .001$) as well as virtuous self-concept ($\beta = .80$; $t(41) = 8.70$, $p < .001$), suggesting that recall of two experiences was associated with greater retrieval fluency and greater virtuous self-concept. When controlling for retrieval fluency, however, the effect of number of requested experiences on virtuous self-concept weakens to non-significance ($\beta = -.11$; $t(41) = -1.24$, *n.s.*) whereas the effect of retrieval fluency remained significant ($\beta = 1.05$; $t(41) = 11.51$, $p < .001$), providing support for the mediating effect of retrieval fluency.

FIGURE 4.4

THE MEDIATION OF RETRIEVAL FLUENCY ON VIRTUOUS SELF-CONCEPT
WITHIN OTHER-CENTERED SACROSANCT EXPERIENCES



* $p < .05$

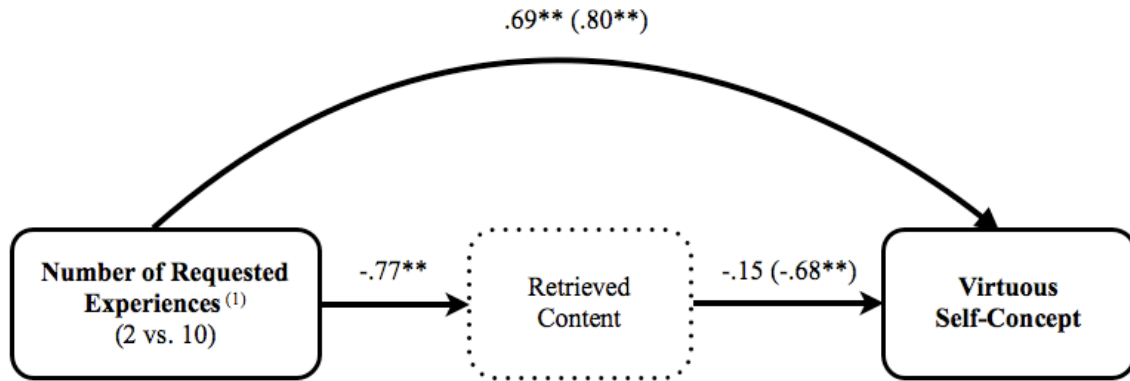
** $p < .01$

⁽¹⁾ Coding: number of requested experiences (0 = 10, 1 = 2 experiences)

When retrieval fluency, however, was substituted in the regression model with retrieved content, the mediation analysis did not find support for the mediating effect of retrieved content. Indeed, as Figure 4.5 shows, retrieved content did not mediate the effect of number of requested experiences on virtuous self-concept, suggesting that actual number of retrieved experiences did not influence positive self-concept but, instead, retrieval fluency affected positive self-concept. These results provide support for the prediction that people are more likely to rely on retrieval fluency, rather than substance of retrieved experiences, when recalling their past other-centered experiences—a finding consistent with pervasive results of recall of virtuous experiences reported in Chapters 1 and 2.

FIGURE 4.5

LACK OF MEDIATION OF RETRIEVED CONTENT ON VIRTUOUS SELF-CONCEPT
WITHIN OTHER-CENTERED SACROSANCT EXPERIENCES



* $p < .05$

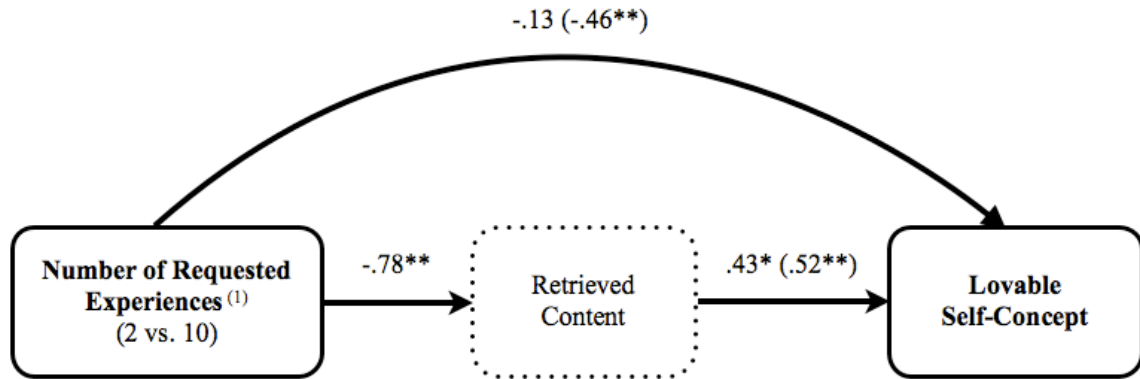
** $p < .01$

(1) Coding: number of requested experiences (0 = 10, 1 = 2 experiences)

The final set of mediation analyses was conducted within self-centered sacrosanct experiences in which retrieved content should work as a mediator. Regression included a categorical variable of number of requested experiences (0 = 10 virtues; 1 = 2 virtues), continuous measure of retrieved content, and lovable dimension of positive self-concept. As Figure 4.6 summarizes, number of requested experiences was correlated with retrieved content ($\beta = -.78$; $t(46) = -8.45$, $p < .001$) as well as lovable self-concept ($\beta = -.46$; $t(46) = -3.50$, $p = .001$), confirming that requesting to recall 10 experiences lead to greater amount or substance of retrieved experiences and greater lovable self-concept. When controlling for retrieved content, the effect of recall on lovable self-concept weakens to non-significance ($\beta = -.13$; $t(46) = -.63$, $n.s.$) whereas the effect of retrieved content remained significant ($\beta = .43$; $t(46) = 2.10$, $p = .04$).

FIGURE 4.6

THE MEDIATION OF RETRIEVED CONTENT ON LOVABLE SELF-CONCEPT
WITHIN SELF-CENTERED SACROSANCT EXPERIENCES



* $p < .05$

** $p < .01$

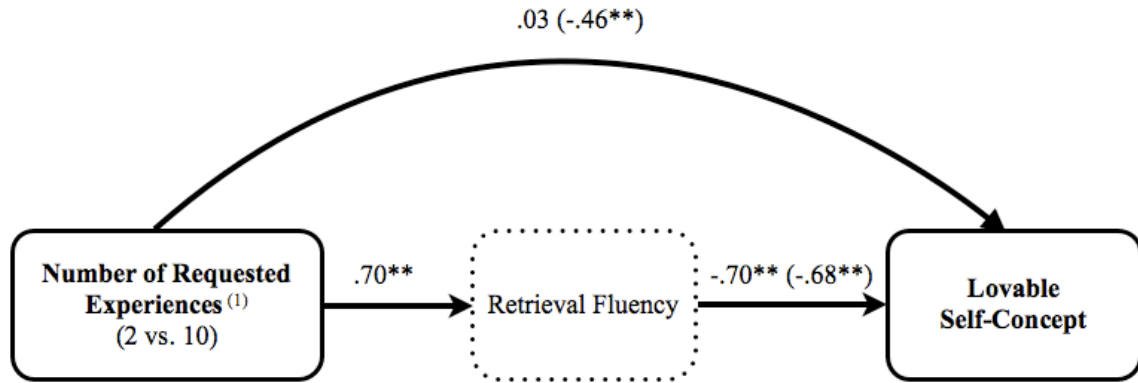
⁽¹⁾ Coding: number of requested experiences (0 = 10, 1 = 2 experiences)

When retrieval fluency was used as a mediator in the regression model, the mediation analysis revealed that retrieval fluency mediated the effect of number of requested experiences on lovable self-concept such that a recall of 10 experiences lead to lower fluency and greater lovable self-concept. The results of this analysis are summarized in Figure 4.7. This finding is consistent with the effect of retrieved content, suggesting that the more experiences people are asked to recall, the more experiences they retrieve or, alternatively, the more difficult these experiences come to mind.

Together, these analyses provide overall support for Hypothesis 8a such that the type of sacrosanct experience determines whether the effect of number of requested experiences on positive self-concept is based on retrieval fluency or retrieved content (i.e., moderated mediation). When participants are asked to recall their other-centered sacrosanct experiences, they establish

FIGURE 4.7

THE MEDIATION OF RETRIEVAL FLUENCY ON LOVABLE SELF-CONCEPT
WITHIN SELF-CENTERED SACROSANCT EXPERIENCES



* $p < .05$

** $p < .01$

⁽¹⁾ Coding: number of requested experiences (0 = 10, 1 = 2 experiences)

evidence for their positive self-concept (i.e., virtuous dimension) through the retrieval fluency with which sacrosanct experiences are retrieved from memory. In this view, just a few sacrosanct experiences leads to greater fluency which in turn translates into a greater virtuous self-concept. However, the reverse effect holds for recalling self-centered sacrosanct experiences. Instead of reliance on retrieval fluency, people establish evidence for their lovable self-concept by relying on the substance of retrieved sacrosanct experiences (i.e., number of recalled experiences).

Discussion

The current study examined how the type of sacrosanct experience affected the relationship between the number of requested sacrosanct experiences and positive self-concept. Consistent with my theory, pretests confirmed that participants with assumed independent self-construal (e.g., U.S. students) perceived self-centered sacrosanct experiences as more important to their self-concept than other-centered sacrosanct experiences. The present study then provided support

for the proposition that the type of sacrosanct experience determines whether positive self-concept is based on retrieval fluency or retrieved content. Indeed, when participants were asked to recall their past other-centered sacrosanct experiences (e.g., helping others in their community), they relied on their subjective feelings of fluency with which their sacrosanct experiences were retrieved, resulting in more favorable self-evaluations when retrieval fluency was high (i.e., recalling just a few experiences) than when it was low (i.e., recalling a lot of experiences). In this view, participants used retrieval fluency, rather than retrieved content, as an evidence for their virtuous self-concept (i.e., fluency-based processing). Conversely, when participants were asked to recall their past self-centered sacrosanct experiences (e.g., making others laugh), people paid attention to the substance of retrieved experiences and rated their self-concept more positively when recalling a lot of past sacrosanct experiences (i.e., content-based processing). In order to provide evidence that recall of both self- and other-centered sacrosanct experiences leads to licensing effects (i.e., using sacrosanct experiences as licenses for self-indulgence), the next study examines the moderating effect of type of sacrosanct experience on the relationship between number of requested experiences and self-indulgent choice.

STUDY 4B: CHOICE OF AN INDULGENCE AS A FUNCTION OF NUMBER OF REQUESTED EXPERIENCES AND TYPE OF SACROSANCT EXPERIENCE

The preceding study showed that a recall of self- and other-centered sacrosanct experiences can activate positive self-concept. The main objective of Study 4b is to further extend these findings and examine whether recall of self- and other-centered sacrosanct experiences serve as licenses for self-indulgence (Hypothesis 7b). Present study also tests whether the type of

sacrosanct experience people are asked to recall determines whether recall leads to fluency- or content-based licensing effects (Hypothesis 8b). In order to further generalize the results of preceding studies, current study tests these hypothesis in the context of a different type of self-centered sacrosanct experience (e.g., personal success as a part of capable beliefs) and different type of self-indulgent choice (e.g., choice of a more indulgent but less healthy snack).

Method

Participants and Design. Participants were 105 undergraduate marketing students (90.5% white Americans, 43.8 % females, $M_{\text{age}} = 21.36$). Groups of up to 12 participants completed the study in a computer lab. Participants were randomly assigned to one of the four conditions in 2 (number of requested experiences: 2 vs. 10) x 2 (type of sacrosanct experience: self- vs. other-centered) between subjects design study.

Procedures. Participants were randomly assigned to one of the four experimental conditions and were again asked to recall either two or 10 sacrosanct experiences. Participants assigned to other-centered condition were asked to list examples of actions in which they volunteered to help others (virtuous experiences). Participants in the self-centered condition were asked to recall examples of actions in which they felt as a successful person (capable). Upon completion of the recall task, participants completed a short filler task that was part of an unrelated study and then proceeded to the decision task. Participants were informed that the marketing department at which the study was being conducted was considering giving participants snacks as incentives for their help later in the same semester and was interested in learning about their snack preferences at the moment. On the next screen, participants were shown six snacks that a previous pretest identified as popular among target population (this pretest will be de-

scribed in more details in Dependent Variables section). They were then asked to imagine that they would be given one of these snacks at the end of their session and indicate which one they would choose. In this choice set, three snacks were more healthy but less indulgent (Nature's Valley, NutriGrain, Special K) and three were less healthy but more indulgent (Snickers, Starburst, M&Ms). After having indicated their choice, participants again listed their reasons for their snack choice and then completed manipulation checks for recall and type of sacrosanct experience, responded to basic demographic questions, and were dismissed.

Stimuli and Measures

Independent Variables. Recall was manipulated by asking participants to remember either two or 10 sacrosanct experiences. Type of sacrosanct experience was manipulated by asking participants to recall experiences related to personal success (self-centered) or helping others (other-centered).

Dependent Variable. The main dependent variable was a choice of a snack from a set of six snacks in which three were more indulgent but less healthy and three less indulgent but more healthy snacks. A pretest (N = 74) conducted earlier in the semester with a similar target population identified Snickers, M&M, and Starburst as appropriate choices for more indulgent and less healthy snacks whereas Nature's Valley, NutriGrain, and Special K were identified as less indulgent but more healthy snacks. Similar to pretests reported earlier in this dissertation, participants were randomly assigned to more indulgent set of snacks or less indulgent set of snacks. Participants in each group then evaluated all three snacks across their indulgent (1-not indulgent/7-indulgent) and healthy dimension (1-not healthy/7-healthy), including perceived guilt if such a snack was consumed (1-no guilt/7-a lot of guilt). As Table 4.3 shows, participants perceived

snacks in more indulgent set as more indulgent, less healthy, and more guilty than those in less indulgent set. Accordingly, all six snacks were used as a part of the choice set in the main study. Choice of a more indulgent snack was coded as 1 whereas choice of a less indulgent snack was coded as 0 and was used as the main dependent variable.

TABLE 4.3
SNACK EVALUATIONS (PRETEST 3)

	More indulgent set (Snickers, M&Ms, Starburst)	Less indulgent set (Nature’s Valley, NutriGrain, Special K)
Indulgent dimension*	5.65 (1.16)	4.32 (1.10)
Healthy dimension*	4.10 (1.05)	5.86 (.98)
Perceived guilt*	4.17 (.99)	2.17 (1.54)

* t-tests significant at $p < .001$

Note. Indulgent dimension was measured by a single item (1-not indulgent/7-indulgent). Healthy dimension was measured a single item as well (1-not healthy/7-healthy). Guilt was measured by a single item adopted from the scale used in earlier pretests (Dahl et al. 2003) on a scale ranging from “no guilt” (1) to “a lot of guilt” (7).

Manipulation Checks. Retrieval fluency was measured by a single item asking participants to rate how difficult it was to generate the requested number of examples on a scale ranging from very difficult (1) to very easy (7). As in preceding studies, retrieved content was measured by counting the number of examples participants recalled. The manipulation check for the type of sacrosanct experience consisted of a single item asking participants to indicate whether the experiences they listed provided benefits to their individual self or others on a seven-point scale ranging from “primarily benefiting others” (1) to “primarily benefiting me” (7).

Results

Manipulation Checks. A 2 (number of requested experiences) x 2 (type of sacrosanct experience) analysis of variance on retrieval fluency confirmed that participants perceived remembering examples of their experiences as easier after having recalled two experiences ($M = 6.06$, $SD = .97$) than after having recalled 10 experiences ($M = 2.73$, $SD = 1.09$; $F(1, 104) = 270.50$, $p < .001$). The main effect of type of sacrosanct experience ($p = .51$) and the two-way interaction were not significant ($p = .78$). A separate ANOVA on retrieved content showed that participants listed 1.92 ($SD = .27$) experiences when asked to recall two experiences and 6.21 ($SD = 1.76$) experiences when asked to recall 10 experiences ($F(1, 104) = 300.93$, $p < .001$). The main effect of type of sacrosanct experience ($p = .59$) and the interaction term were not significant ($p = .81$). Finally, an ANOVA on the type of sacrosanct experience confirmed that participants perceived self-centered experiences with personal success as more likely to benefit the individual self ($M = 5.88$, $SD = .78$) than other-centered experiences with helping others ($M = 3.51$, $SD = 1.51$; $F(1, 104) = 86.94$, $p < .001$). The main effect of recall ($p = .48$) and the two-way interaction were not significant ($p = .79$). Thus, all manipulations worked as intended.

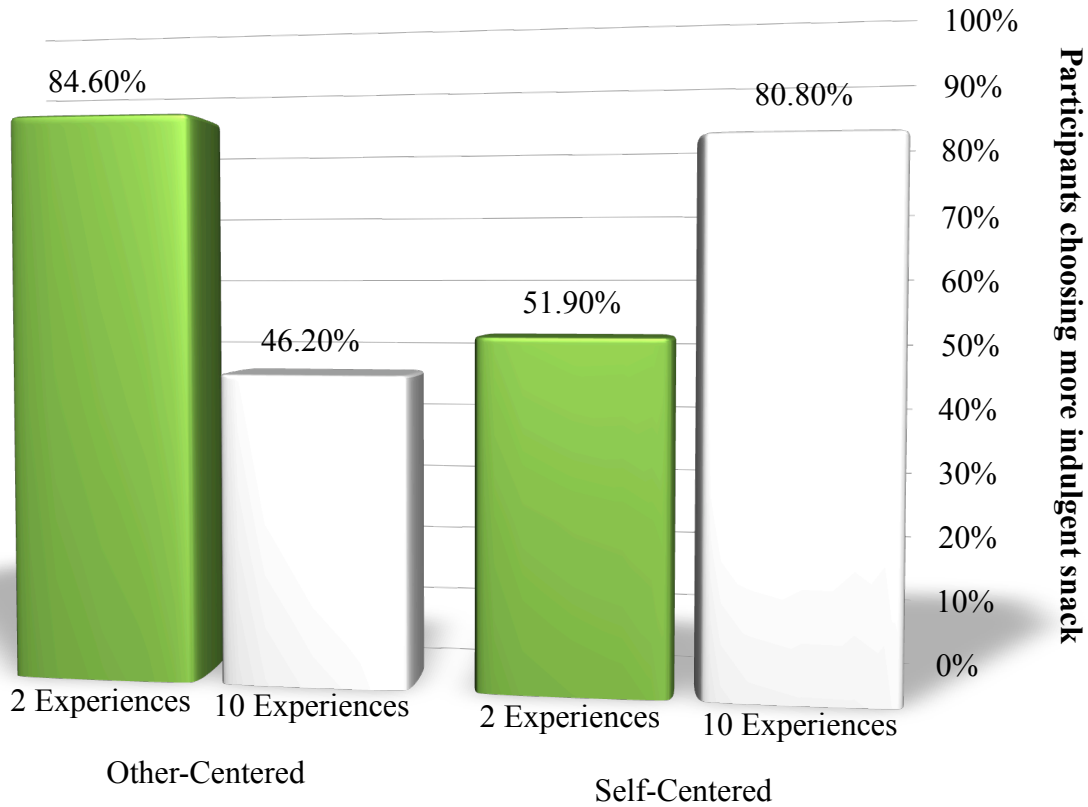
Self-Indulgent Choice as a Function of Number of Requested Experiences and Type of Sacrosanct Experience. If the interaction between number of requested experiences and type of sacrosanct experience affects choice in the same way as it affected positive self-concept in Study 4a, recall of sacrosanct experiences will increase likelihood of choosing a more indulgent but less healthy snack but each will do so via different processes, depending on the type of recalled experience. Whereas recall of self-centered sacrosanct experiences should result in more licensing when recalling a lot of experiences, recall of other-centered sacrosanct experiences should

result in more licensing when recalling just a few experiences. In order to test this moderating effect of the type of sacrosanct experience, a logistic regression was used to analyze the data. All variables in the model were treated as two-level categorical variables: recall (0 = 10 experiences, 1 = 2 experiences), type of sacrosanct experience (0 = other-centered, 1 = self-centered), and choice (less indulgent = 0, more indulgent = 1). The full model then included both categorical variables and the two-way interaction term.

The main effect of number of requested experiences ($\beta = 1.86$, Wald = 7.68, $p = .006$) and type of sacrosanct experience were significant ($\beta = 1.59$, Wald = 6.28, $p = .012$). More importantly, these main effects were qualified by a significant two-way interaction ($\beta = -3.22$, Wald = 12.25, $p < .001$). As Figure 4.8 reveals, 84.60% of participants who recalled two examples of other-centered experiences chose the more indulgent but less healthy snack but only 46.20% of participants did so after having recalled 10 other-centered experiences ($\chi^2 = 8.50$, $p = .004$). An opposite effect emerged when participants recalled their self-centered experiences; 51.90 % of participants who were asked to two experiences chose the more indulgent snack but 80.80% of participants who were asked to recall 10 experiences chose the more indulgent but less healthy snack ($\chi^2 = 4.94$, $p = .026$). These results provide support for hypothesis 7b, suggesting that recall of other-centered sacrosanct experiences yields effects consistent with fluency-based licensing whereas recall of self-centered leads to outcomes consistent with content-based licensing. The question is, however, whether these effects are driven by different processes. I explore this question next.

FIGURE 4.8

LICENSING AS A FUNCTION OF NUMBER OF REQUESTED EXPERIENCES
AND TYPE OF SACROSANCT EXPERIENCE



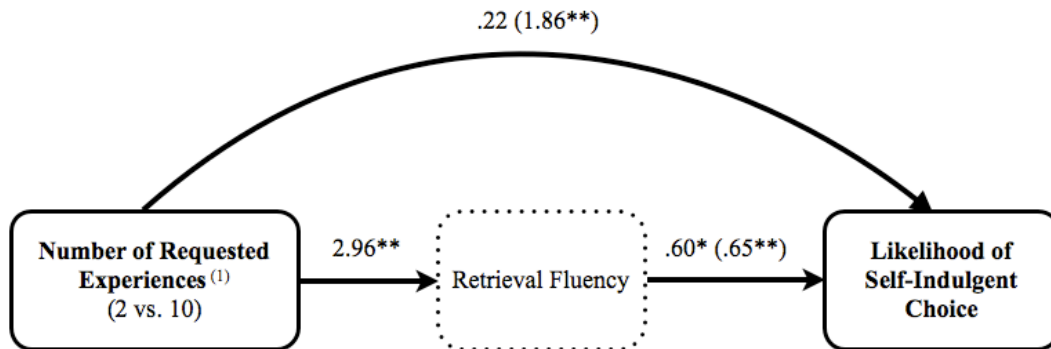
Experimental Conditions

Mediation Analyses. Hypothesis 8b predicts a moderated mediation such that the type of mediator (retrieval fluency versus retrieved content) varies across different types of sacrosanct experiences (other- versus self-centered). As in analyses used in Study 4a, I followed procedures outlined by Baron and Kenny (1986) to test for the moderated mediation. The first set of mediation analyses were conducted within other-centered sacrosanct experiences. The first regression and logistic regression models included a categorical variable of number of requested experiences (0 = 10 virtues; 1 = 2 virtues), a continuous measure retrieval fluency (mediator), and

categorical variable of choice (less indulgent = 0, more indulgent = 1). Number of requested experiences was correlated with retrieval fluency ($\beta = 2.96$; $t(52) = 12.87$, $p < .001$) as well as choice ($\beta = 1.86$; Wald = 7.68, $p = .006$), suggesting that recall of two experiences was associated with greater retrieval fluency and greater likelihood of licensing. When controlling for retrieval fluency, the effect of number of requested experiences on choice weakened to non-significance ($\beta = .22$; Wald = .05, *n.s.*) whereas the effect of retrieval fluency remained significant ($\beta = .60$; Wald = 4.39, $p = .036$). Figure 4.9 summarizes the results of this analysis.

FIGURE 4.9

THE MEDIATION OF RETRIEVAL FLUENCY ON SELF-INDULGENT CHOICE
WITHIN OTHER-CENTERED SACROSANCT EXPERIENCES



* $p < .05$
** $p < .01$

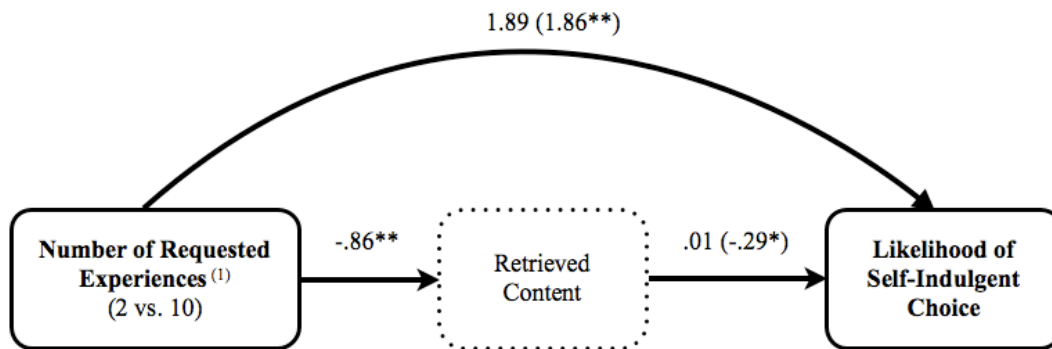
(1) Coding: number of requested experiences (0 = 10, 1 = 2 experiences), choice (0 = less indulgent, 1 = more indulgent)

When retrieved content was used as a mediator in the model, the mediation analysis did not find support for the mediating effect of retrieved content. As Figure 4.10 summarizes, retrieved content did not mediate the effect of number of requested experiences on self-indulgent choice, suggesting that retrieval fluency, rather than the number of recalled experiences, affected

likelihood of licensing. In order to provide support for moderated mediation, however, the second analysis within self-centered sacrosanct experience needs to demonstrate a reversed pattern—that is, retrieved content but not retrieval fluency operates as a mediator on choice of indulgent snack.

FIGURE 4.10

LACK OF MEDIATION OF RETRIEVED CONTENT ON SELF-INDULGENT CHOICE
WITHIN OTHER-CENTERED SACROSANCT EXPERIENCES



* $p < .05$
** $p < .01$

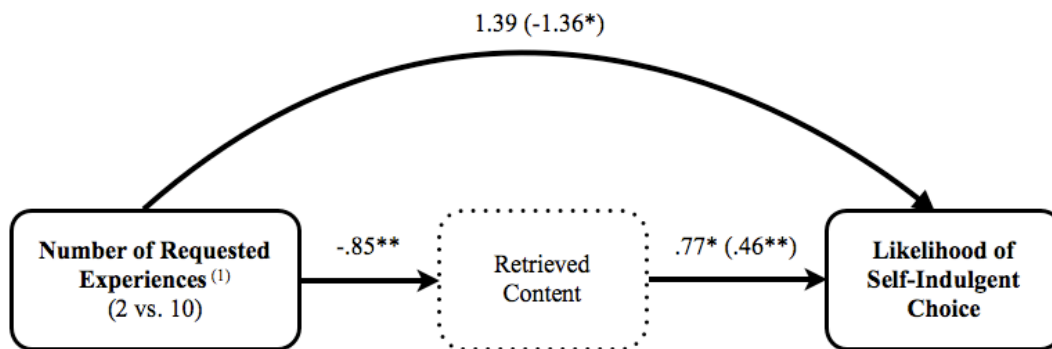
(1) Coding: number of requested experiences (0 = 10, 1 = 2 experiences), choice (0 = less indulgent, 1 = more indulgent)

The second set of mediation analyses was conducted within self-centered sacrosanct experiences in which retrieved content is expected to work as the mediator. Models used in these analyses included a categorical variable of number of requested experiences (0 = 10 virtues; 1 = 2 virtues), continuous measure of retrieved content, and categorical variable of choice (less indulgent = 0, more indulgent = 1). As Figure 4.11 shows, number of requested experiences was correlated with retrieved content ($\beta = -.85$; $t(52) = -11.37$, $p < .001$) as well as choice ($\beta = -1.36$; $Wald = 4.68$, $p = .03$), suggesting that requesting to recall 10 experiences lead to greater amount or substance of retrieved experiences and greater likelihood of licensing. Controlling for re-

trieved content weakened the effect of number of requested experiences on choice to non-significance ($\beta = 1.39$; Wald = 1.09, *n.s.*) whereas the effect of retrieved content remained significant ($\beta = .77$; Wald = 4.58, $p = .03$).

FIGURE 4.11

THE MEDIATION OF RETRIEVED CONTENT ON SELF-INDULGENT CHOICE
WITHIN SELF-CENTERED SACROSANCT EXPERIENCES



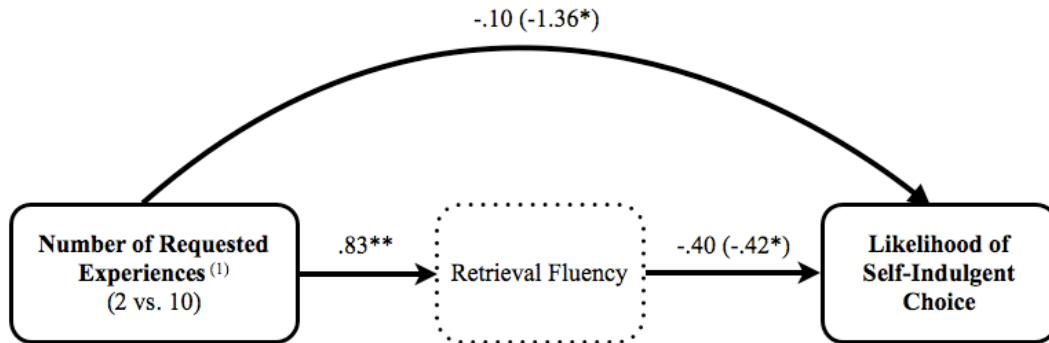
* $p < .05$
** $p < .01$

(1) Coding: number of requested experiences (0 = 10, 1 = 2 experiences), choice (0 = less indulgent, 1 = more indulgent)

When retrieval fluency was used as a mediator in the regression model, the mediation analysis revealed that retrieval fluency didn't mediate the effect of number of requested experiences on licensing. The results of this analysis are summarized in Figure 4.12. Together, the results of the moderated mediation analyses provide full support for the Hypothesis 8b that predicted that recall of other-centered experiences leads to fluency-based licensing effect whereas recall of self-centered experiences leads to content-based licensing effect.

FIGURE 4.12

LACK OF MEDIATION OF RETRIEVAL FLUENCY ON SELF-INDULGENT CHOICE
WITHIN SELF-CENTERED SACROSANCT EXPERIENCES



* $p < .05$
** $p < .01$

⁽¹⁾ Coding: number of requested experiences (0 = 10, 1 = 2 experiences), choice (0 = less indulgent, 1 = more indulgent)

Analysis of Cognitive Responses. Consistent with preceding studies, the coding of participants' reasons for their snack preference did not reveal any signs of participants' awareness between the recall task and their snack choice.

Discussion

The current study provided support for the proposition that the type of sacrosanct experience determines whether licensing emerges as a result of retrieval fluency or retrieved content. When participants were asked to recall their other-centered sacrosanct experiences (e.g., helping others in their community), they relied on their subjective feelings of fluency with which sacrosanct experiences were retrieved from memory and were therefore more likely to indulge when retrieval fluency was high (i.e., recalling just a few experiences) than when it was low (i.e., recalling a lot of experiences). In this view, licensing increased as a function of increasing fluency of retrieval, rather than increasing substance of retrieved experiences (i.e., fluency-based licens-

ing effect). Conversely, when participants were asked to recall their self-centered sacrosanct experiences (e.g., personal success), people were more likely to rely on the substance of retrieved experiences and consequently were more likely to license when recalling a lot of sacrosanct experiences than just a few experiences. Under such conditions, licensing did not increase as a function of subjective feelings of fluency but, instead, as a function of amount of accessible content (i.e., content-based licensing effect).

Consistent with results of Study 4a, these findings provide convergent evidence that the type of sacrosanct experience people are asked to access in their memory determines whether they rely on retrieval fluency or retrieved content when establishing evidence for their positive self-concept and earning the licenses for self-indulgence. As alluded to earlier, however, studies presented in this chapter focused on participants with assumed chronically accessible independent self-construal (e.g., U.S. students; Aaker and Lee 2001)—that is, participants who perceived self-centered sacrosanct experiences as more important to their self-concept (i.e., more construal compatible) than other-centered sacrosanct experiences (i.e., less construal-compatible). The final chapter further builds on these findings and explores how people with more independent versus interdependent self-construal within the same culture respond to recalls of sacrosanct experiences to provide insights whether herein examined effects can (or cannot) be generalized across individuals with more interdependent self-construal.

CHAPTER 5

THE ROLE OF SELF-CONSTRUAL IN LICENSING

Consider two persons, Peter and John. Peter is a single man without any children whose primary concern is his career success. John, on the other side, is a married man and father of two children whose primary concern is to be a responsible and caring husband and father. Now imagine that both Peter and John walk into a grocery store to buy a snack and notice a sign asking “Can you remember your last personal accomplishments that made you proud of yourself?” Given the distinctly different construals of Peter (i.e., more likely to be of independent self-construal) and John (i.e., more likely to be of an interdependent self-construal), if Peter and John process this message and think about their past personal accomplishments, are they both equally likely to license? This is the questions that motivates the final chapter of my dissertation. On the basis of recent research exploring the motives and goals that drive behavior of individuals with different self-construal (e.g., Aaker and Lee 2001), I will argue that both content- and fluency-based licensing effects surrounding sacrosanct beliefs are expected to be particularly pronounced for individuals whose self-concept is construed predominantly around independence but are not very likely to emerge for those whose self-concept is built around interdependence. As such, I will propose that the type of sacrosanct experience (other- versus self-centered) moderates the relationship between number of requested experiences and licensing within individuals with more independent self-construal only (i.e., independents); no such moderating effect will be predicted within individuals with more interdependent self-construal (i.e., interdependents).

THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

A considerable amount of research shows that the behavior of individuals with independent and interdependent self-construal is influenced by distinctly different types of motives and goals (e.g., Aaker and Lee 2001). In general, independents are swayed by self-enhancement motives such that they try to maintain a positive and flattering self-image. Consistent with these motives, independents have been found to be dominated by informationally dubious preferences to hold very unrealistic flattering opinions about themselves (Sedikides 1993) and to maintain a positive self-image, even at the cost of portraying inaccurate image of the self, particularly when it comes to socially desirable behaviors such as volunteering or acting nice in social situations (Epley and Dunning 2000, 2006; Van Boven et al. 2005). In contrast, interdependents tend to be driven by self-improvement motives to maintain an accurate image about the self. Given such motives, interdependents tend to be less likely to portray biased or unrealistic self-images because communicating inaccurate self-images may prevent them from effective assimilation with others (Higgins 1998). Not surprisingly, independents, relative to interdependents, were found to be more susceptible to self-affirmation effects such as affirming the self with positive self-views when making esteem-threatening choices (Heine et al. 1999).

Given that licensing can be viewed as one type of self-affirmation (e.g., Dunning 2007) in which recall of sacrosanct experiences affirms the self of its positive nature, it appears that independents' tendency toward self-enhancement may help independents in establishing evidence for positive self-concept and licensing, but interdependents' tendency toward self-improvement may not be as effective in enhancing positive self-concept and thus licensing. In support of this logic, Aaker and Lee (2001) have suggested that the values and motives associated with each type of

self-construal have important implications for chronically activated goals which in turn have implications for how differences in self-construal may relate to licensing effects. For example, independents tend to be oriented toward goals expressing individuality and following their attitudes and emotions whereas interdependents tend to be oriented toward goals of social social cohesion and conforming to social norms (Ybarra and Trafimow 1998). Furthermore, independents' greater tendency toward self-enhancement makes them more likely to pursue approach goals toward attainment of positive outcomes and gains such as advancement, achievement, and aspirations. By contrast, interdependents' greater tendency toward self-improvement makes them more likely to pursue avoidance goals toward security and responsibility (Aaker and Lee 2001; Lee et al. 2000). Accordingly, independents, relative to interdependents, were found to be more susceptible to pursuing positive outcomes such as pleasure, even at a cost of making suboptimal decisions (Aaker and Lee 2001) or more willing to take social risks (Mandel 2003), and more likely to act on their feelings and pursue impulsive or uncontrolled consumption (Zhang and Shrum 2009).

What do these distinctly different motives and goals associated with independent and interdependent self-construals imply for licensing? Licensing is concerned about using past sacrosanct experiences as means for liberating self-indulgent consumption, consumption of products for one's own pleasure and fun. Because self-indulgent consumption is considered as less responsible and guilt-prone consumption practice that is difficult to justify and often a source of social objections (Dahl et al. 2003; Dhar and Wertenbroch 2000), interdependents should be more likely to activate self-regulation goals that prevent them from portraying undesirable images. Indeed, Zhang and Shrum (2009) have shown that interdependents were more likely to

suppress urge for uncontrolled and impulsive consumption, presumably due to activation of self-regulation. Conversely, individuals with independent self-construal should be more likely to activate their pleasure-seeking goals and act therefore in a manner consistent with such goals. In support of this logic, Zhang and Shrum (2009) showed that independents were more susceptible to impulsive consumption and reported more positive attitudes toward consumption otherwise associated with negative self-attributions of guilt (e.g., beer consumption) than interdependents.

My reasoning suggests that licensing may be particularly pronounced for individuals with independent self-construal but less pronounced, or non-existent, for those with interdependent self-construal. Consequently, my earlier theorizing about the moderating effect of the type of sacrosanct experience on the relationship between number of requested sacrosanct experiences and licensing (i.e., using sacrosanct acts as licenses to self-indulge) should hold for those with independent construal but not those with interdependent self-construal. Specifically, when individuals with independent self-construal recall sacrosanct experiences less compatible with their construal and therefore less important to their self-concept (other-centered), they will be more likely to license after having retrieved just a few sacrosanct experiences rather than a large number of such experiences (fluency-based licensing effect). When recalling sacrosanct experiences more compatible with their construal and thus more important to their self-concept (self-centered), they will be more likely to license after having retrieved a large number of sacrosanct experiences rather than just a few of them (fluency-based licensing effect). No such effects, however, should be observed within individuals with interdependent self-construal who may avoid making self-indulgent choices, regardless of what type of sacrosanct experience they are asked to recall. In other words, interdependents will self-construal will further moderate the effect of type of sacro-

sanct experience on the relationship between requested number of sacrosanct experiences and licensing. Stated formally:

H9: *The interaction between number of requested sacrosanct experiences and the type of sacrosanct experience on licensing will be further moderated by self-construal such that:*

H9a: *When individuals with independent self-construal are asked to recall other-centered (self-centered) sacrosanct experiences, fluency-based (content-based) licensing effect will result such that they will be more likely to license when asked to recall a small (large) number of sacrosanct experiences than when asked to recall a large (small) number of sacrosanct experiences.*

H9b: *When individuals with interdependent self-construal are asked to recall self- or other-centered sacrosanct experiences, they will not license.*

In this chapter, I advanced the notion that herein examined fluency- and content-based licensing effects will hold within groups with independent self-construal but not within those with interdependent self-construal. In the final section of this chapter, I present research design, method, and results of an experiment designed to test the three-way interaction between number of requested experiences, type of sacrosanct experience, and self-construal to provide support for the proposition developed on this chapter.

RESEARCH DESIGN, METHOD, AND RESULTS

STUDY 5: LICENSING AS A FUNCTION OF SELF-CONSTRUAL, TYPE OF SACRO-SANCT EXPERIENCE, AND NUMBER OF REQUESTED EXPERIENCES

A considerable amount of research has shown that independent self-construals tend to be nurtured in individualistic cultures (e.g., North America, Western Europe), whereas interdepend-

ent is nurtured in more collectivist cultures (e.g., Asia, Eastern Europe; Oyserman, Coon, and Kimmelmeier 2002; Singelis 1994). It is also well documented, however, that both self-construal dimensions co-exist together and vary even within the same culture (Aaker and Williams 1998; Markus and Kitayama 1991). Due to limited accessibility to cross-cultural samples, the present study follows more conservative approach used in prior research (e.g., Ferraro, Bettman, and Chartrand 2009) by measuring self-construal within population with predominantly chronically more accessible independent self-construal (e.g., U.S. students at a large state university). The current study then tests the moderating effect of measured self-construal (independent vs. interdependent; Singelis 1994) on the interaction effect between number of requested experiences and the type of sacrosanct experience (other- vs. self-centered) on self-indulgent choice between two pairs of sunglasses one of which is more hedonic and expensive.

Method

Participants and Design. Participants were 115 freshman undergraduate biology and environmental science students (57.4 % females, $M_{\text{age}} = 20.00$) who received course credit for their participation. Groups of up to 25 participants completed the study in a classroom setting at the beginning of a class meeting. In this study, participants were randomly assigned to one of the four conditions in a 2 (number of requested experiences: 2 vs. 10) x 2 (type of sacrosanct experience: self- vs. other-centered) between subjects design.

Procedures. All participants first completed a self-construal scale (Singelis 1994) presented as a general questionnaire and ostensibly unrelated to a next study. Upon completion of the questionnaire, participants completed an unrelated filler task and then proceeded to the recall task. Depending on the condition, participants were asked to remember two or 10 examples of

either self- or other-centered sacrosanct experiences. Following the recall task, participants proceeded to the same decision task as in Study 1a. In this task, participants were asked to imagine that they received an income tax rebate of \$500 and were choosing between two pairs of sunglasses, one of which was more hedonic and expensive. After having indicated their choice, they responded to an open ended question asking them to share reasons for their choice, followed by manipulation checks for fluency and type of sacrosanct experience, and basic demographic questions.

Stimuli and Measures

Independent Variables. Recall was manipulated as in preceding studies. Participants were asked to recall either two or 10 examples of their past sacrosanct experiences. The type of sacrosanct experience was manipulated on the basis of pretest results and consisted of asking participants to recall examples of actions in which they helped someone in their community (virtuous as other-centered) or made someone laugh (lovable as self-centered). Finally, self-construal was measured by an established scale (Singelis 1994) in which participants were asked to indicate their agreement with a set of 24 statements; 12-items measured independent dimension (e.g., “Speaking up during a class is not a problem for me,” “I enjoy being unique and different from others in many respects”) and 12-items measured interdependent dimension (e.g., “It is important for me to maintain harmony within my group,” “I will sacrifice my self-interest for the benefits of the group I am in”). All items were on seven-point scales anchored “strongly disagree” (1) and “strongly agree” (7). Both scales exhibited acceptable internal reliabilities with Cronbach’s $\alpha = .73$ and $.75$ for interdependent and independent subscales, respectively. The self-construal score that accounted for both interdependent and independent dimensions of self-view was calculated

following procedures adopted from prior research exploring the role of self-construal in consumer behavior (Ferraro et al. 2009). Self-construal scores were then calculated as interdependent self-construal z-score minus independent self-construal z-score, where large positive values represent high interdependence and low independence (i.e., interdependent self-construal) and large negative values represent high independence and low interdependence. Small positive or negative values indicate being high or low on both dimensions. Given that this procedure uses standardized z-scores, the self-construal scores were dichotomized to represent those above zero (high interdependence, low independence) and those below zero (high independence, low interdependence). This procedure was adopted from Ferraro et al. (2009).

Dependent Variable. The dependent variable was the same as in Study 1a and consisted a choice between more hedonic and expensive sunglasses (Italian frames sunglasses for \$110) and less hedonic and expensive sunglasses (American frames sunglasses for \$50).

Manipulation Checks. The manipulation check for recall task was measured by a single item asking participants to rate how difficult it was to generate the requested number of examples on a scale ranging from very difficult (1) to very easy (7). This measure was again used as a continuous measure of retrieval fluency. As in preceding studies, retrieved content was measured by counting the number of experiences participants listed. Finally, the manipulation check for the type of sacrosanct experience consisted of a single item asking participants to indicate whether the experiences they listed in the recall task provided benefits to their individual self or others on a seven-point scale ranging from “primarily benefiting others” (1) to “primarily benefiting me” (7).

Results

Manipulation Checks. A 2 (number of requested experiences) x 2 (type of sacrosanct experience) x 2 (self-construal) analysis of variance on retrieval fluency confirmed that participants who were asked to recall two sacrosanct experiences perceived the task as easier ($M = 6.16$, $SD = 1.04$) than those who were asked to recall 10 experiences ($M = 2.97$, $SD = 1.65$; $F(1, 114) = 153.52$, $p < .001$). The main effects of type of sacrosanct experience ($p = .14$) and self-construal ($p = .41$) and all higher order effects ($p > .13$) were not significant. A separate ANOVA on retrieved content indicated that participants listed 2.00 experiences when asked to recall two experiences and 5.86 ($SD = 2.06$) experiences when asked to recall 10 experiences ($F(1, 114) = 196.39$, $p < .001$). The main effects of experience type ($p = .15$) and self-construal ($p = .20$) and all higher order interaction terms were not significant ($p > .15$). The manipulation of number of requested experiences worked as intended.

Finally, an ANOVA on the type of sacrosanct experience showed that participants who were asked to recall self-centered sacrosanct experiences perceived them as more likely to benefit the self ($M = 5.47$, $SD = .94$) than participants who were asked to recall other-centered experiences ($M = 3.98$, $SD = .79$; $F(1, 114) = 83.61$, $p < .001$). The main effect of recall ($p = .32$) and self-construal ($p = .87$) were not significant. All higher order effects were not significant ($p > .10$). Together, these results suggest that the manipulation of the type of sacrosanct experience worked as intended—self-centered sacrosanct experiences (lovable) were perceived as more likely to benefit the self than other-centered sacrosanct experiences (virtuous).

Licensing as a Function of Self-Construal, Type of Sacrosanct Experiences, and Number of Requested Experiences. The main objective of the present study is to explore licensing effects across individuals with different self-construal. Given that I expect licensing effects for independent self-construals only, I predicted a three-way interaction such that level of self-construal (independent versus interdependent) moderates the interaction between recall and type of sacrosanct experience. In this view, when independents recall other-centered sacrosanct experiences (less compatible with construal), they will license more when they recall just a few experiences than when they recall a lot of experiences (fluency-based licensing effect). A reverse effect will result when recalling self-centered sacrosanct experiences (more compatible with construal): independents will license more when they are asked to recall a lot of experiences rather than just a few (content-based licensing effect). In contrast to independents, however, no such effects are predicted for interdependent self-construals who should avoid licensing—that is, using their sacrosanct experiences as licenses for self-indulgence. Thus, the interaction should emerge for independents but not interdependents.

In order to explore these relationships, a logistic regression was used for analysis. The model included all independent variables and all of the interaction terms. In the model, all independent variables were treated as two-level categorical variables: number of requested experiences (0 = 10 experiences, 1 = 2 experiences), type of sacrosanct experience (0 = other-centered, 1 = self-centered), and self-construal (0 = interdependent, 1 = independent). The results of a full model revealed no significant main effects. However, results revealed a significant Type of Experience x Self-Construal interaction ($\beta = 4.59$, Wald = 7.60, $p = .006$), and, most importantly, a significant three-way interaction between number of requested experiences, type of sacrosanct

experience, and self-construal ($\beta = -6.97$, Wald = 11.16, $p = .003$). Given my prediction that self-construal moderates the interaction between number of requested experiences and type of sacrosanct experience, I examine the specified interaction within each type of self-construal.

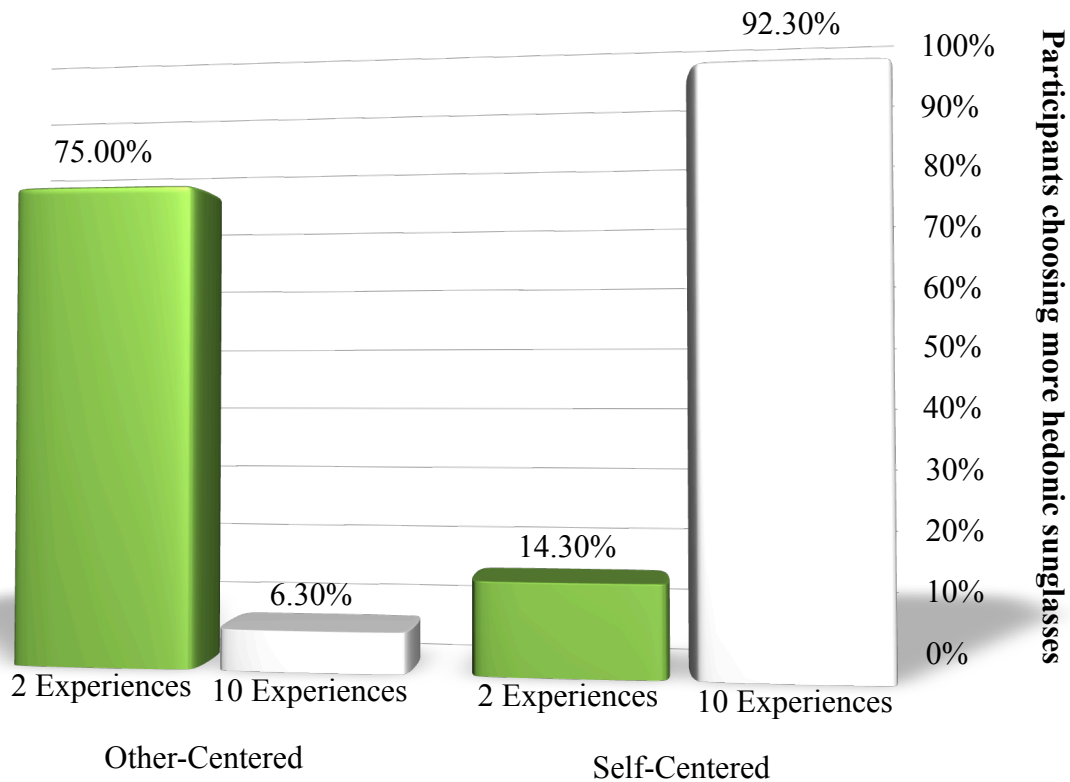
Licensing Effects within Independent Self-Construal. The analysis of a simple two-way interaction number of requested experiences x type of sacrosanct experience revealed a significant interaction ($\beta = -8.08$, Wald = 20.56, $p < .001$). In addition, main effects of number of requested experiences ($\beta = 3.81$, Wald = 9.59, $p = .002$) and type of sacrosanct experience ($\beta = 5.19$, Wald = 12.54, $p < .001$) were significant. As Figure 5.1 summarizes, when independents recalled other-centered sacrosanct experiences (less construal-compatible), they licensed more when they were asked to retrieve just a few experiences than when they were asked to recall a lot of these experiences. Specifically, 75.00% of participants who recalled two experiences chose the more hedonic and expensive sunglasses but only 6.30% of participants of those who recalled 10 experiences chose the more hedonic and expensive sunglasses ($\chi^2 = 14.12$, $p < .001$). As such, independents licensed more when recalling just a few other-centered experiences—a pattern consistent with fluency-based licensing effect. A converse effect, however, was observed when independents had retrieved self-centered sacrosanct experiences (more construal-compatible).

Whereas 14.30 % of participants who recalled just two experiences chose the more hedonic pair of sunglasses, 92.30% of participants who recalled 10 experiences chose the more hedonic and expensive sunglasses ($\chi^2 = 16.44$, $p < .001$). Independents licensed more, the more self-centered experiences they recalled which is consistent to content-based licensing effect. Thus, these results provide support for hypothesis 9a that predicted that the type of sacrosanct experience people are asked to recall determines whether licensing emerges as an outcome of retrieval fluency

or retrieved content. The question in the present study, however, is whether this effect also emerges for interdependents. I focus on this issue in the next analysis.

FIGURE 5.1

LICENSING AS A FUNCTION OF NUMBER OF REQUESTED EXPERIENCES AND TYPE OF SACROSANCT EXPERIENCE WITHIN INDEPENDENT CONSTRUAL



Experimental Conditions

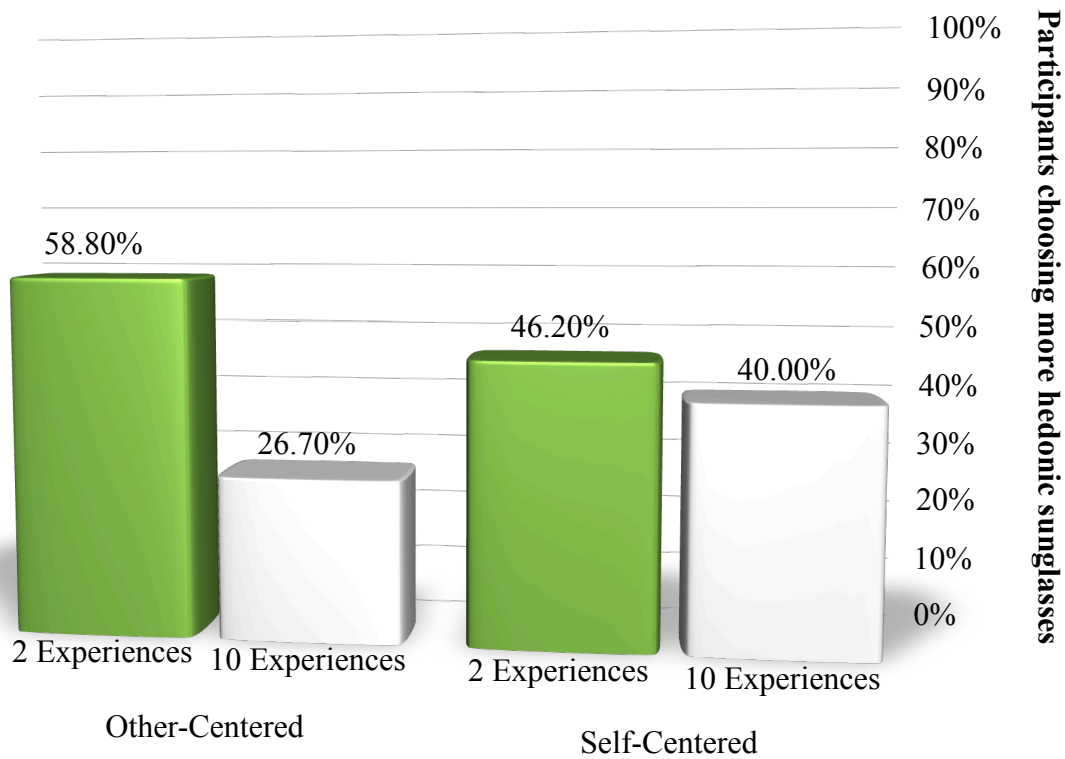
Licensing Effects within Interdependent Self-Construal. A simple two-way interaction (number of requested experiences x type of sacrosanct experience) within interdependents only was not significant ($\beta = -1.12$, Wald = 1.07, $p = .30$). Main effects of number of requested experiences and type of sacrosanct experience were not significant, with p -values of .07 and .44, respectively. Figure 5.2 summarizes the results of this analysis. As predicted in hypothesis 9b, no

licensing effects were found within interdependents. When these individuals recalled self-centered sacrosanct experiences (less compatible), 40.00% of participants who recalled two experiences versus 46.20% of participants who recalled 10 chose the more hedonic sunglasses ($p = .74$). Interestingly, when interdependents recalled other-centered sacrosanct experiences that are more compatible with their construal, 58.70% of participants who recalled just two experiences chose the more hedonic sunglasses whereas 26.70% of participants who recalled 10 experiences chose these sunglasses ($\chi^2 = 3.35, p = .07$). This result suggests that recalling other-centered sacrosanct experiences that should be more compatible with interdependent self-construal may lead to a licensing effect consistent with fluency-based pattern (rather than content-based) even within interdependents. However, this result may be attributable to the fact that current study uses measured self-construal. As noted by Oyserman et al. (2002), it is risky to assume that differences on some criterion variable are the result of measured difference in self-construal (at the cultural or individual level). These differences may be attributable to factors such as cultural differences in scale usage, socially desirable responding, or other unmeasured cultural differences. As priming self-construal addresses many of these concerns (Oyserman and Lee 2008), future research will need to address this unpredicted result in order to confirm whether herein examined licensing effects are limited to independent self-construals only. Together, the results presented in the current study provide support for Hypothesis 9a in which I predicted that the type of sacrosanct experience determines whether independents license on the basis of retrieval fluency or retrieved content. However, Hypothesis 9b is only partially supported, suggesting that even though the type of sacrosanct experience does not determine whether interdependents license on

the basis of retrieval fluency or retrieved content, recall of other-centered sacrosanct experiences lead to marginally significant licensing effect consistent with fluency-based pattern.

FIGURE 5.2

LICENSING AS A FUNCTION OF NUMBER OF REQUESTED EXPERIENCES AND TYPE OF SACROSANCT EXPERIENCE WITHIN INTERDEPENDENT CONSTRUAL



Experimental Conditions

Analysis of Cognitive Responses. Consistent with preceding analyses, the coding of participants' reasons for their sunglasses choice did not reveal any signs of participants' awareness of the relationship between a recall task and their product choice.

Discussion

The present study illustrated that the fluency-based and content-based licensing effects are particularly pronounced for individuals with independent self-construal but were less likely to occur for those with interdependent self-construal. As predicted, the moderating effect of the type of sacrosanct experience (self- versus other-centered) on the relationship between number of requested experiences and licensing reported in Study 4b was replicated within individuals with independent self-construal but did not emerge within those with interdependent self-construal. Indeed, when independents were asked to recall their other-centered sacrosanct experiences (virtuous), they licensed in patterns consistent with fluency-based licensing effect: they were more likely to indulge when they recalled just a few experiences rather than when they recalled a lot of experiences. Conversely, when independents were asked to recall their self-centered sacrosanct experiences (lovable), they were more likely to indulge after having retrieved a lot of lovable experiences rather than just a few. By contrast, no such effect emerged when interdependents were asked to recall their self-centered sacrosanct experiences. Contrary to my prediction, however, when interdependents were asked to recall their other-centered sacrosanct experiences, they demonstrated a weak licensing effect consistent with fluency-based pattern: they were more likely to indulge after having recalled just a few virtuous experiences rather than a lot of them. As discussed earlier, this effect may be attributable to the fact that present study relied on measured self-construal. Future research will need to test herein examined licensing effects using alternative methods such as priming rather than measuring self-construal (Oyserman and Lee 2008).

CHAPTER SIX

GENERAL DISCUSSION, IMPLICATIONS, AND CONCLUSION

This dissertation focused on providing insights into the relationship between the sacrosanct side of a consumer (e.g., virtuous, lovable, capable) and his or her indulgent side. In doing so, it has advanced a novel approach to understanding of how information accessible in memory can affect positive self-concept and subsequent self-indulgent decisions. In this approach, sacrosanct experiences accessible in one's memory serve as largely unconscious licenses for self-indulgent decisions (i.e., licensing effect). To provide support for this novel approach, I first focused on a specific type of sacrosanct experiences—virtuous experiences with charitable and helpful behaviors—that has been of a primary interest of the majority of existing research on self-indulgent consumption. I then proposed that recall of virtuous experiences can render two distinct informational inputs, retrieval fluency (i.e., subjective feelings of ease with which information comes to mind) or retrieved content (i.e., substance of recalled information), both of which might affect the present state of the self (i.e., positive self-concept) and influence subsequent self-indulgent decisions. Accordingly, I developed two competing predictions. In the first prediction, I argued that recalling just a few virtuous experiences (high retrieval fluency) would establish evidence for one's positive self-concept and would increase the likelihood of licensing. The second prediction, however, advanced a more intuitive alternative in which recalling a lot of virtuous experiences (large retrieved content) would establish evidence for the positive self-concept and lead to greater licensing. The first set of studies tested these competing predictions

in order to identify which of the two inputs is more likely to affect licensing when it comes to a recall of virtuous experiences (e.g., helping others or the environment).

Contrary to the intuitive prediction that licensing would increase as a function of an increasing number of recalled virtues, I provided convergent evidence for the perhaps less intuitive effect: recalling just a few virtues increases licensing. Indeed, in the first two studies, I showed that when people recall their past virtues they are more likely to choose a more indulgent option when they recall just two virtues (high retrieval fluency) than when they recall 10 of them (low retrieval fluency). I then found in Study 2 that the effect of number of requested virtues on licensing was mediated by positive self-concept such that high retrieval fluency with which virtues were retrieved, rather than the substance of retrieved content, resulted in more positive evaluations of the present self, which in turn licensed people to indulge. In Study 3, I then identified a boundary condition for this fluency-based licensing effect. When people become aware of why the recall task was easy or difficult (i.e., discounting cues), they did not rely on retrieval fluency but instead on retrieved content to guide their self-indulgent decisions. Consequently, likelihood of licensing increased as a function of retrieved content such that the more virtues people recalled, the more likely they indulged—a pattern consistent with the content-based licensing effect. All together, the first four studies provided convergent evidence that recalling past virtuous experiences affects licensing in ways consistent with stated hypotheses for fluency-based licensing effects.

Building on these findings, I subsequently advanced the notion that virtues are only a small subset of a potentially larger system of positive self-beliefs that may provide individuals with positive self-concept boost and thus serve as licenses to self-indulge. In this view, I adopted

Dunning's (2007) notion of sacrosanct beliefs about the self and proposed that sacrosanct experiences that portray the self as moral (i.e., virtuous), lovable, and capable can all establish evidence for positive self-concept and serve as licenses for self-indulgent consumption. By putting these beliefs into a context of individual's self-construal (independent versus interdependent), I was then able to classify sacrosanct experiences according to their relation to the distinct self (independence) or others (interdependence). Consequently, I recognized two types of sacrosanct beliefs: (1) self-centered sacrosanct beliefs defined as those portraying experiences benefiting primarily the individual self, including those portraying lovable and capable self-beliefs, and (2) other-centered sacrosanct beliefs defined as those portraying experiences benefiting primarily those external to the self, comprising beliefs associated with morality or virtue. More importantly, however, I showed in Studies 4a and 4b that whether or not people use retrieval fluency or retrieved content as a primary input for establishing evidence for their positive self-concept and licensing was determined by the type of sacrosanct experience people recall (self- or other-centered). Given that the primary focus of my research is on consumers in the United States who are assumed to be more independent than interdependent (e.g., Lee and Aaker 2001; Zhang and Shrum 2009), recall of other-centered sacrosanct experiences (less compatible with an independent self-construal) lead to greater reliance on retrieval fluency when affirming the self of its positive self-concept and guiding their self-indulgent decisions (fluency-based licensing effect). A reverse effect was found for recalling self-centered sacrosanct experiences (more compatible with independent self-construal). Under such conditions, people used substance of retrieved content as the primary input for affirming positive self-concept and self-indulgent decisions (content-based licensing effect).

In the final chapter, I then presented theory supporting the notion that both fluency- and content-based licensing effects may be limited to groups with more independent and less interdependent self-construal but may not emerge within groups with more interdependent and less independent self-construal. Indeed, Study 5 showed that the moderating effect of the type of sacrosanct experience (self- versus other-centered) on the relationship between number of requested experiences and licensing reported in Study 4b was replicated within individuals with independent self-construal but not within those with interdependent self-construal. Consistent with preceding studies (e.g., Study 4a and 4b), when independents were asked to recall their other-centered sacrosanct experiences (virtuous), they licensed in patterns consistent with fluency-based licensing effect. Conversely, when independents were asked to recall their self-centered sacrosanct experiences (lovable), they were more likely to indulge after having retrieved a lot of lovable experiences rather than just a few—a pattern consistent with content-based licensing effect. By contrast, when interdependents were asked to recall self-centered sacrosanct experiences, the licensing effect did not emerge. Contrary to my prediction, however, when interdependents were asked to recall their other-centered sacrosanct experiences, they demonstrated a weak licensing effect consistent ($p = .07$) with fluency-based pattern: they were more likely to indulge after having recalled just a few virtuous experiences rather than a lot of them. As alluded to earlier, this result is very likely due to reliance on measured self-construal rather than more accurate and less biased methods such as priming self-construal that is more likely to avoid issues associated with self-reported measures (Oyserman and Lee 2008).

Together, the theory and empirical tests presented in my dissertation established compelling evidence that recall of sacrosanct experiences (moral, lovable, capable) systematically af-

fects preferences among more or less indulgent options, particularly for consumers with more independent self-construal. These licensing effects were demonstrated on choices between more or less hedonic and expensive products (types of sunglasses), a luxury and a necessity (designer jeans and vacuum cleaner), and more or less healthy and indulgent snacks. In the next section, I discuss the contributions of these results to the marketing literature.

CONTRIBUTION OF THE DISSERTATION RESEARCH

This dissertation research makes several important contributions, each of which is related to better understanding of how the sacrosanct side of a consumer affects actions of his or her self-indulgent side. First and foremost, it contributes to research on self-indulgent consumption. Past research investigating how consumers earn their right to indulge or how they yield to temptations has identified several guilt-reducing tactics that help consumers to justify their self-indulgent choices. For example, Strahilevitz and Myers (1998) demonstrated that tying charitable incentives such as donating to charity to frivolous products increases preferences for such products. Along similar vein, Khan and Dhar (2006) showed that participants who expressed a virtuous intent or committed to a virtuous act were subsequently more likely to choose a more indulgent product. Furthermore, Khan and Dhar (2007) revealed that merely expressing future virtuous intent can lead to increased preferences for indulgences as well. The current research offers a different view at these effects, a view in which people do not need to express a virtuous intent (Khan and Dhar 2006, 2007) or donate to a charity (Strahilevitz and Myers 1998). Findings presented in my dissertation show that merely thinking of one's virtuous past can increase prefer-

ences for frivolous or indulgent products by establishing evidence for a virtuous self in the present time.

More importantly, my research demonstrates that licensing effects may not be restricted to virtuous acts only. Instead, they can be extended to a wider web of positive self-beliefs such as sacrosanct beliefs that claim the self to be moral (i.e., virtuous), lovable, and capable (Dunning 2007). Experiences that portray these characteristics can all affirm the self of its sacrosanct nature and subsequently lead to licensing, particularly for those with independent self-construals. Indeed, when participants recalled their self-centered sacrosanct experiences (lovable or capable), they also established evidence for their positive selves and subsequently were more likely to self-indulge. Though this type of licensing required recalling many experiences (rather than just a few), it still led to licensing. These results suggest that licensing may be based on general self-affirmation in which boosting self-concept dimensions from non-virtuous domains also results in greater preferences for indulgences.

Another guilt-reducing mechanism that has received attention in this stream of research is the role of effort on indulgence. For example, Kivetz and Simonson (2002a) showed that greater effort (i.e., in terms of number of required purchases) reduces the guilt that is often associated with choosing luxuries over necessities. In a similar vein, the same authors showed that perceived greater effort followed by praising feedback on an effortful task also increased preferences for indulgences over necessities (Kivetz and Simonson 2002b). This view is consistent with prior research on the role of depletion and its impact on self-control that suggests that a choice or task that depletes person's limited self-control resources makes it more difficult to resist temptations (Muraven and Baumeister 2000). Across all of these accounts, however, earning

justification for self-indulgence required costs such as high effort, excellent performance, or depleting self-control resources. My research reveals that relatively effortless tasks may earn an individual the right to indulge. Indeed, participants who completed the easy recall task in which they were asked to recall just two examples of their past virtues were more likely to indulge later on, even though the task was perceived as easy, than participants who completed the difficult recall task. Presumably, tasks with potential to activate some positive aspect of the self may affect subsequent decisions in ways that divert from those otherwise predicted by effort or mental depletion accounts. Proper understanding of how effort affects preferences for indulgences may therefore require accounting for the impact of a task on a self-concept. It is possible that certain types of tasks (e.g., performance tasks) may not only affect perceived level of effort but also prime a task-relevant part of the self-concept which in turn may become the principle driver of the self-indulgent decision.

In addition to contributing to research on indulgent consumption, the current research contributes to literature on accessibility experiences (i.e., retrieval fluency). Prior research in this domain has shown that when participants recall instances of behaviors in which they engaged (e.g., assertiveness), they are more likely to rate themselves as having more of a given characteristic after recalling just a few instances of such behavior rather than many such instances (Schwarz et al. 1991; Rothman and Schwarz 1998). In this view, people construe their self-evaluative judgments based on retrieval fluency. However, this research has not examined why people rely on fluency when construing self-evaluative judgments in the first place. Though recent research provides important insights in terms of information accessibility (Tybout et al. 2005), it is less clear what makes certain types of information more or less accessible when it

comes to judgments about the self. Results of the studies presented in this dissertation suggest that basing self-evaluations on retrieval fluency is contingent on the compatibility between the type of behavior people are asked to recall and their chronically accessible self-construal, particularly for those individuals with more independent than interdependent self-construal. Indeed, it is when recalled behaviors are less compatible with independent self-construal that fluency has particularly pronounced effects on subsequent self-affirmation of a positive self-concept. When it comes to a recall of behaviors that are more compatible with such self-construal, substance of retrieved content appears to have a particularly strong effect on self-evaluative judgments. These results suggest that proper understanding of how fluency experiences affect self-evaluative judgments may require considerations of chronically more accessible parts of one's self-concept.

Moreover, my results reveal that fluency experiences in the domain of self-evaluative judgments can have a systematic impact on subsequent decisions in domains unrelated to the initial fluency experience. By integrating recent research in licensing (e.g., Khan and Dhar 2006) with fluency experiences, the empirical work presented in this dissertation provides initial insights into how fluency experiences affect decisions in domains unrelated to the initial fluency experience. Indeed, when participants were asked to recall their other-centered sacrosanct experiences (i.e., virtuous), retrieval fluency not only affirmed the self of his or her virtuous nature but also served as a license for subsequent self-indulgent decision. Though self-evaluations of positive self-concept are directly related to the initial fluency experience (e.g., recall of virtuous experiences), self-indulgent decision (e.g., choice of a luxury) bears no logical relevance to such an experience. As such, present work provides initial evidence for potentially pervasive fluency-

based effects that affect a sequence of judgments, rather than just an isolated judgment (e.g., Schwarz et al. 1991).

Lastly, this dissertation provides initial insights into how sacrosanct beliefs about the self influence consumer behavior. Recently, Dunning (2007) has raised the concern of a lack of understanding about how self-image motives impact consumer decision making. In his call for research, Dunning proposed that people's everyday decisions may be swayed by sacrosanct beliefs about the self such that whatever decision people make must also honor and affirm a flattering image of the self. In his view, consumer decision-making may benefit if it was construed as a process of belief harmonization in which people arrange their preferences and beliefs into a harmonious system of cognitions. Given that such harmonization process may often occur outside of people's explicit awareness, sacrosanct beliefs about the self may potentially lead to unwise and risky decisions (Dunning 2007). The research presented in this dissertation attempted to answer such a call by exploring how sacrosanct experiences accessible in memory affect consumers' self-indulgent decisions. The results of my studies provide compelling evidence that when people are asked to retrieve their past sacrosanct experiences that portray the self as moral, lovable, and capable, they can use such experiences as licenses for self-indulgent consumption and do so without being aware that their self-indulgent choice was driven by the recall of their sacrosanct experiences. Though current research has not explored how self-indulgent decision subsequently affects sacrosanct beliefs about the self (e.g., Does a person feel less sacrosanct after having indulged?), it provides evidence that recalling sacrosanct experiences can affect self-indulgent decisions—that is, decisions that are viewed as unwise or irresponsible consumption practice.

IMPLICATIONS FOR FUTURE RESEARCH

Though my dissertation research provides robust evidence for the effect of recall of sacrosanct experiences on self-indulgent choices, including its underlying mechanisms, it also generated several opportunities for further research. My research builds on the notion that recalling past sacrosanct experiences affirms the self of its sacrosanct nature and subsequently increases preferences for indulgent options. However, my studies focused on a relatively broad framing of recall tasks such as listing examples of experiences in which participants volunteered to help others in their community or acted in environmentally responsible ways. For exploratory purposes, I examined the type of sacrosanct experiences participants listed in their recall tasks. This analysis revealed that when participants were asked to list examples of their other-centered sacrosanct experiences, most examples were relatively specific and concrete (e.g., “I volunteer to teach children to read once a month” or “I held the door open for another student this morning”). In contrast, when participants listed examples related to self-centered sacrosanct experiences, most examples were relatively abstract (e.g., “I told a joke,” “I made a funny face,” “I received a good grade”). A considerable amount of research in decision making and judgments shows that people can construe thoughts at different levels of construal, varying from high levels (i.e., abstract or vague) to low levels (i.e., concrete and specific), each having different impact on subsequent judgments or decisions (Liberman and Trope 1998). A fruitful avenue for future research might be to examine whether a recall of different types of sacrosanct experiences leads to judgments based on different levels of construal. For example, would people license more or less after being asked to recall low-level-construal sacrosanct experiences (e.g., helping elderly people in a community) versus high-level-construal sacrosanct experiences such as those used in

current research? What about recalling past versus future sacrosanct experiences? Exploring these questions may shed important light into other factors that may eventually determine whether retrieval fluency or retrieved content is used as a primary input for licensing when it comes to recall of sacrosanct experiences.

In a similar vein, the results of my pretests for studies in Chapter 4 revealed that certain sacrosanct experiences were viewed as relatively mixed. For example, participants listed experiences portraying the kind and honest side of their selves as both moral and lovable. In my studies, however, I only focused on those that were clearly classified as one of the three sacrosanct beliefs (moral, lovable, or capable). Testing how people process information related to multiple sacrosanct beliefs may increase understanding of factors that contribute to greater reliance on retrieval fluency as the primary input for self-evaluative judgments and, potentially, licensing. It may be the case that people have an automatic tendency to use fluency when it comes to socially desirable characteristics—that is, experiences portraying something that is desirable in a given social environment. Stretching this idea even further, very different recall effect may emerge when people retrieve information related to honesty experiences. Recently, Mazar, Amir, and Ariely (2008) have shown that when people are mindful of moral standards (i.e., honesty), they are more likely to adhere to a stricter delineation of honest and dishonest behavior than when they are not mindful of these standards. In the context of licensing and recall of sacrosanct experiences, recalling virtues portraying the honest side of the self may lead to activation of positive self-concept but also stricter adherence to form more honest self-evaluations. In other words, recall tasks requiring retrieval of honesty experiences may prime people with honesty and potential decrease reliance on subjective feelings but increase reliance on substance of retrieved content to

assure more honest self-evaluations. Exploring the role of honesty within licensing effects may provide important insights into the limitations of licensing effects based on recall of virtuous experiences.

Another promising avenue for future research is to determine whether licensing can be self-activated. In my work, participants licensed after they recalled their past sacrosanct experiences. What is important to note about this type of licensing is that it is based on self-knowledge stored in a person's memory. When this knowledge is accessed, the process of retrieval can affirm the self of its sacrosanct nature and subsequently lead to licensing. In this view, participants are unaware of the relationship between their choice and initial recall task because licensing occurs in a largely non-conscious manner. Thus, a truly intriguing question is whether licensing is induced by stimuli external to the self (e.g., someone asking the self to recall past virtues) or can be self-induced, giving a rise to self-licensing. What if people unconsciously search their minds for evidence of their sacrosanct nature at times when such a nature is threatened by a preferred choice at hand? In other words, what if sacrosanct thoughts about one's self come to a mind automatically and still without one's awareness? As noted by Dunning (2007), the process of consumer decision making may require "arranging and revising one's beliefs [sacrosanct], needs, and preferences into a network of cognitions that produces little, if any, tension or disharmony among its various elements." Under such an assumption, licensing may emerge as an outcome of a relatively automatic process motivated by individual's need to maintain a harmonious view of the self. In terms of automaticity (Bargh 1997), it may be the case that affirming the self of its sacrosanct nature is beyond people's control; they may be aware of the process but they may be unable to stop it. The process could also occur without awareness that a given choice is affected

by the concern for the self (i.e., maintaining sacrosanct view of the self). Examining whether licensing can also occur automatically would certainly provide important insights into the interplay between consumers' sacrosanct side and his or her indulgent side.

IMPLICATIONS FOR MARKETING PRACTICE

The findings of the present dissertation research have important implications for marketers of both relative luxuries as well as necessities, particularly those interested in marketing products and services across consumer segments with predominantly individualistic values (e.g., North America). First, the results suggest that marketers can control consumers' preferences for both luxuries and necessities by deliberately reminding consumers of their past sacrosanct experiences. By manipulating the fluency with which consumers can recall their past experiences portraying their moral, lovable, or capable side, marketers can become more efficient in controlling which products consumers may choose at a given time. For example, retailers may benefit from integrating recall-based stimuli as a part of their store design or in-store promotions and advertising, especially at locations where luxuries or indulgent products are offered. Similarly, restaurants, coffee shops, and travel agencies may integrate sacrosanct reminders as a part of their store designs to influence consumer choice. Finally, online or catalogue retailers might be among those benefiting most from these tactics as marketers have a better control about a shopping sequence through which a potential customer proceeds when browsing or shopping via online or catalogue outlets.

Second, the results of studies presented in my dissertation suggest that recalling past sacrosanct experiences can both increase preferences for luxuries but may also diminish such pref-

erences, depending on the type and number of sacrosanct experience marketers ask consumers about. As Study 1 showed, 38.20% of participants who did not commit to a virtuous act in an initial task (i.e., replication of Khan and Dhar's study) chose the more hedonic option versus 27.80% of participants who were asked to recall many virtuous experiences chose the more hedonic option. Though this difference was not statistically significant ($p = .31$), this result suggests that recall-based tactics may, at least to some extent and under certain conditions (e.g., number and type of requested experiences) reduce preferences for luxuries. Though future research still needs to confirm whether recall-based tactics can indeed shift preferences from luxuries to necessities, my results already hint that such tactics might be a fruitful venue for future research and may have important implications for firms interested in encouraging more socially responsible consumption.

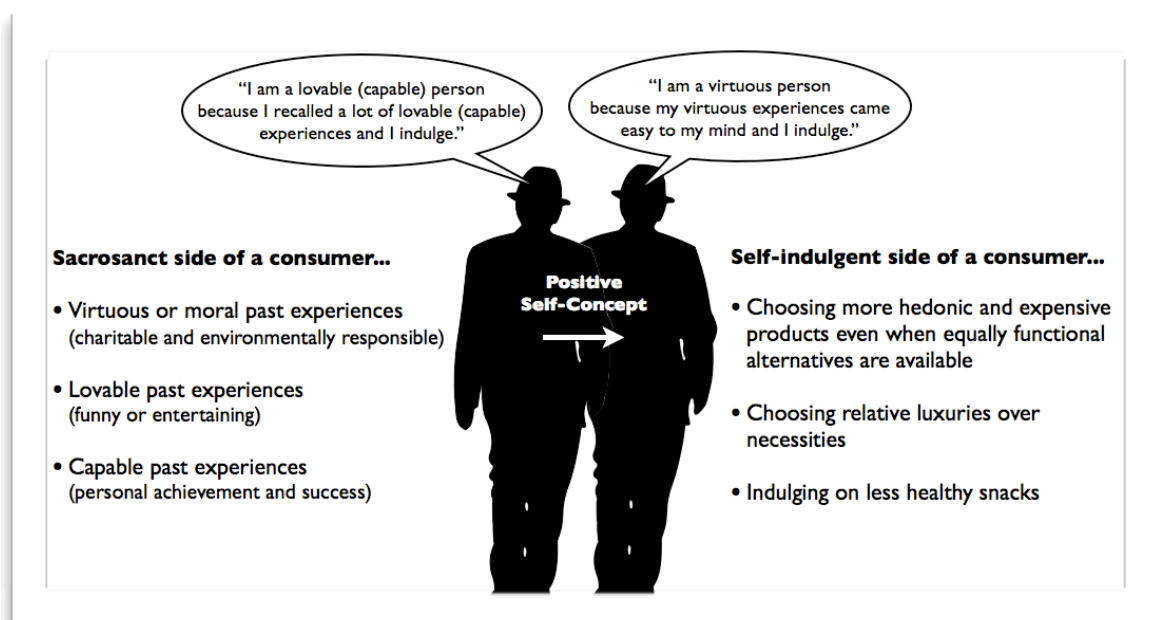
CONCLUSION

What have I learned about the interplay between a sacrosanct nature of a consumer and his or her indulgent side? As Figure 6.1 illustrates, the research presented in my dissertation has revealed that consumers can earn their license to indulge on the basis of information they have already accessible in their memory (e.g. autobiographical memories related to their sacrosanct acts), but only when their construal is built around independence rather than interdependence. When consumers with such construal are asked to retrieve information related to their sacrosanct experiences portraying their virtuous, lovable, and capable past acts, they affirm their selves of their positive nature at a present time and subsequently feel liberated to indulge—that is, engage in acts deviating from sacrosanct nature. Interestingly, this recall experience renders two rather

distinct processes, each using different inputs for self-evaluative judgments and thus licensing, depending on the type of sacrosanct experience people are asked to retrieve. When asked to access information related to experiences that are more compatible with an independent construal (self-centered), consumers affirm themselves of their positive nature on the basis of the substance of what they can retrieve from their minds. In this view, licensing increases as a function of increasing number of retrieved self-centered experiences. A reverse effect emerges when it comes to other-centered experiences (virtues) that are less compatible with an independent construal. When recalling these virtuous experiences, consumers affirm themselves of their positive nature on the basis of the feelings that accompany their thinking process. Consequently, licensing increases as a function of decreasing number of retrieved other-centered experiences or, alternatively, increasing fluency of recall.

FIGURE 6.1

THE TWO SIDES OF A CONSUMER REVISITED



Though my empirical investigation of the interplay between sacrosanct and self-indulgent sides of consumers yields important insights into how consumers' sacrosanct past affects their indulgent presence, my work also generated many new and intriguing questions that future research can address in order to better understand how these two rather conflicting sides can coexist. My research suggests that the sacrosanct side helps the indulgent side to satisfy its urge for pleasure and fun. The real question is whether consumers need marketers to remind them of their sacrosanct past (e.g., recalls) or will they do so on their own simply to assure harmonious yet flattering state of the self?

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APPENDICES

APPENDIX A

MEASURES USED IN THE PRETEST FOR STUDY 1A

HEDONIC AND UTILITARIAN DIMENSIONS OF PRODUCTS AND SERVICES SCALE

<i>Item</i>	<i>Dimension</i>
Effective/ineffective	Utilitarian
Helpful/unhelpful	Utilitarian
Functional/not functional	Utilitarian
Necessary/unnecessary	Utilitarian
Practical/impractical	Utilitarian
Not fun/fun	Hedonic
Dull/exciting	Hedonic
Not delightful/delightful	Hedonic
Not thrilling/thrilling	Hedonic
Enjoyable/unenjoyable	Hedonic

Note. Scale developed by Voss, Spangenberg, and Grohmann (2003). All items are on a seven-point scale with 1 as most positive and 7 as most negative.

GUILT SCALE

<i>Item</i>	<i>Anchors</i>
Please indicate the degree of guilt you would feel if you bought [product] :	no guilt/lot of guilt no remorse/lot of remorse very bad/not at all bad

Note. Scale developed by Dahl, Honea, and Manchanda (2003). All items are on a seven-point scale with 1 as most positive and 7 as most negative.

APPENDIX B

STIMULI USED IN STUDY 1A

EXAMPLE OF EASY RECALL MANIPULATION

(HIGH RETRIEVAL FLUENCY)

Remember examples of actions in which you volunteered to help others in your community and then list two (2) examples of such actions in the space below.

Note: separate each example by a comma.

CHOICE BETWEEN MORE AND LESS HEDONIC PRODUCT

Imagine that you received a tax rebate of \$500 from the IRS (Internal Revenue Services) and are now thinking of buying a pair of sunglasses with this money. Consider the following options:

Sunglasses A	Sunglasses B
<ul style="list-style-type: none">• Italian designers frames• Highly resistant to scratch and impact• Ultra lightweight with adjustable temples and nose pads	<ul style="list-style-type: none">• American frames• Resistant to moderate impact and scrape• Regular weight with fixed temples and nose pads
Average customer rating: ★★★★★ Price: \$ 110	Average customer rating: ★★★★★☆ Price: \$ 50

Note. Adopted from Study 2 by Khan and Dhar (2006).

APPENDIX C

MEASURES USED IN STUDY 2

SELF-ASSESSMENT ITEMS USED IN STUDY 2

<i>Item</i>	<i>Positive Self-concept</i>
I am compassionate.	Yes
I am tidy.	No
I am sympathetic.	Yes
I am warm.	Yes
I am careful.	No
I am funny.	No
I am helpful.	Yes
I am punctual.	No

Note. These items were adopted from Khan and Dhar (2006).

APPENDIX D

MATERIALS USED IN THE PRETEST FOR STUDIES 4A AND 4B

IDENTIFYING SELF- AND OTHER-CENTERED SACROSANCT EXPERIENCES

Instructions: In general, people like to view themselves as moral, capable, and lovable individual. These views are often referred to as positive self-beliefs and represent images that represent something that is desirable in a person. In the following, we are interested in your experiences that made you feel like moral, capable, or lovable person. In the following, please read the description of a given self-belief and then respond to each of the open-ended questions.

1. Moral self-belief refers to being concerned with the principles of right and wrong behavior and the goodness or badness of human character. When you think of being moral, what experiences or actions made you feel like a moral person? Please list three experiences only and separate each with a comma.
 2. Capable self-belief refers to having the ability, fitness, or quality necessary to do or achieve a specified thing. When you think of being capable, what experiences or actions made you feel like a capable person? Please list three experiences only and separate each with a comma.
 3. Lovable self-belief refers to inspiring or deserving love or affection. When you think of being lovable, what experiences or actions made you feel like a lovable person? Please list three experiences only and separate each with a comma.
-

Note: This survey was conducted online and all questioned appeared on the same page.

APPENDIX E

MEASURES USED IN STUDY 4A

SELF-ASSESSMENT ITEMS USED IN STUDY 4A

<i>Item</i>	<i>Positive Self-concept</i>
I am compassionate.	Moral
I am charming.	Lovable
I am sympathetic.	Moral
I am warm.	Moral
I am popular.	Lovable
I am funny.	Lovable
I am helpful.	Moral
I am likable.	Lovable

Note. These items were adopted from Khan and Dhar (2006).