SOCIAL NAVIGATION IN THE PURSUIT OF SELF-CONTROL GOALS

A Dissertation

by

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ABSTRACT

A number of major societal issues today stem from individual-level struggles with self-control. To this point, much self-control research has focused on the intra-psychic interplay between an isolated individual and the tempting decision at hand. However, what of the external, societal forces that may dramatically shape our choices between virtue and vice? Indeed, it has been posited that self-control ultimately exists in human beings as a means to serve the underlying purpose of helping us to be good members of a group. Still, despite the powerful influence individuals exert on one another, relatively little has been researched regarding ways that social influence impacts self-control.

Essay 1 examines "parallel" self-control decisions. In a series of studies spanning the domains of money, time management, and food consumption, consumers demonstrated a tendency to bond over matched self-control decisions through "co-indulgence" or "co-abstinence." The perceived severity of choosing vice over virtue influenced when each of these matched outcomes produced greater affiliation.

Essay 2 examines the effects of confession self-control behavior. While there may be many reasons one might choose to disclose one's "sins," very little is known about what confession actually *does*: is confession licensing or reinforcing for subsequent self-control decisions? Essay 2 proposes the theory and demonstrates across four studies that confessing high-guilt events boosts subsequent self-control, while confessing relatively low-guilt indiscretions results in a classic licensing effect.

Overall, this dissertation has not only theoretical implications for the literature in both marketing and psychology in the areas of self-control, social influence and social identity, but has both managerial and public policy implications as well. To theory, this work contributes a new framework, new constructs, and new results that expand our understanding of self-control decision making and the role of others in those decisions.

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Finally, I am at a loss for words to express my gratitude to my wife Kristin and our children Jonah, Carrie, Mack and Luke. They each sacrificed a great deal for six years so that we could have a brighter future together as a family. This work is not mine alone, but belongs to each of them.

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INTRODUCTION

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ESSAY 1: (IM)MORAL SUPPORT: THE SOCIAL OUTCOMES OF PARALLEL SELF-CONTROL DECISIONS*

"One's friends are that part of the human race with which one can be human."

- George Santayana

Synopsis

Though most consumer self-control decisions are made individually, they are rarely made in isolation. Temptations are often simultaneously encountered by multiple members of a group or dyad and thereby susceptible to social influence. However, little is known about these "parallel" self-control decisions or the resulting social consequences. In a series of studies spanning the domains of money, time management, and food consumption, consumers demonstrated a tendency to bond over matched self-control decisions through "co-indulgence" or "co-abstinence." The perceived severity of choosing vice over virtue influenced when each of these matched outcomes produced greater affiliation. When indulgence threatened to seriously hinder goal progress, consumers bonded through moral support evidenced by joint abstention. When the consequences were perceived as relatively less severe, consumers found friendship

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through partnering in crime by both indulging. Throughout, guilt underlies the relationship between self-control behaviors and social outcomes as peer compliance reduces guilt and thus improves affiliation.

Introduction

As consumers, it is an inescapable reality that temptation, in some shape or form, finds us every single day. The comforting news, perhaps, is that it finds *all* of us. The dessert menu isn't only staring at you; it is staring at everyone in the restaurant. The beach isn't just begging you to call in sick; it is also calling out to your co-workers. That sale rack didn't catch only your attention; it caught the eyes of several other likely cash-strapped shoppers. Fundamentally, the consequences of these decisions take on additional meaning depending upon whether one is dining, ditching, or shopping alone or alongside someone else grappling with the same decision. These types of shared self-control decisions, which we introduce as "parallel self-control decisions," wherein a momentary temptation applies simultaneously to multiple actors, are commonplace social negotiations with a potentially formative influence on human relationships. And yet, despite the wealth of literature on the topic of self-control, such parallel self-control decisions remain virtually unexplored.

Lay theories on the subject do exist and generally seem to fall into one of two camps: for example, many consumers side with Henry Ford who claimed, "My best friend is the one who brings out the best in me." Other consumers' experiences may

resonate more with Ralph Waldo Emerson who quipped, “It is one of the blessings of old friends that you can afford to be stupid with them.” The question then, is do consumers bond more through moral support, through partnering in crime, or through some combination of the two? This issue is far from trivial as positive social relationships are essential for mental, physical, and emotional well-being, and their absence is related to a wide array of negative outcomes (Cacioppo et al. 2008).

Recent work has drawn attention to the lack of research on shared decisions or decisions by dyads (Simpson, Griskevicius, and Rothman 2012). The involvement of a peer or partner fundamentally alters the decision making process in several ways, as we are influenced by others in a variety of joint-decision scenarios (Gorlin and Dhar 2012). Such shared experiences can alter not only the decisions we make (McFerran et al. 2010), but also the content (Ramanathan and McGill 2007) and our subjective evaluations (Raghunathan and Corfman 2006) of the experience. A parallel self-control decision regarding consumption is in many ways unique from consuming alone; however, little prior research has examined these decisions.

As such, we propose a new dyadic framework for examining parallel self-control decisions. Specifically, we conceptualize a *parallel self-control decision* as one in which two different people face the same or similar self-control conflict simultaneously, with each person free to choose whether to indulge or abstain. We use the term “parallel” rather than “shared” to clearly indicate that each person within the dyad is making his or her own choice—therefore the decision faced is the same for both actors, but each individual makes his or her decision independently, rather than collectively. Then, in a

series of five studies, we examine the impact of dyadic self-control decisions on affiliation (or "liking," due to the often closely related nature of the constructs; e,g., Lakin and Chartrand 2003). In general, we find that matching behavior supports increased affiliation. Importantly, we demonstrate that the merits of the *type* of matched behavior, either mutually indulging or mutually abstaining, are dependent upon the severity of the indulgence itself. Specifically, when the consequences of self-control failure are perceived to be rather serious, consumers bond through supporting each other in abstention, whereas when the consequences are relatively less severe, consumers bond through mischievously partnering in their "crime." Further, we propose and demonstrate that the guilt that a consumer experiences as a result of both the nature of the indulgence and the behavior of their peer mediates this relationship. Finally, we conclude with a series of future research directions that build upon our framework in order to further extend our current understanding of dyadic self-control decision making.

The Social Relevance of Self-Control Decisions

Of the many publicly-made decisions made in a "parallel" manner with other individuals, we focus specifically on those involving self-control. This is primarily due to a growing body of research suggesting a fairly unique relationship between self-control and social relationships.

Self-control can be defined as the overriding of a predominant response tendency in favor of a more controlled behavioral response (Metcalfe and Mischel 1999), and is

associated with a long list of positive life outcomes (Tangney et al. 2004). Among those positive life outcomes, and most germane to the current work, are several positive social outcomes. Information regarding another individual's self-control is generally highly indicative of their social attractiveness. For example, people consider others to be more trustworthy once they have demonstrated self-control (Righetti and Finkenauer 2011). High self-control individuals tend to show more empathy, to be more forgiving and loyal, as well as more willing to accommodate in their relationships (Finkel and Campbell 2001; Pronk et al. 2010; Pronk, Karremans, and Wigboldus 2011). It has even been suggested that self-control evolved for the very purpose of facilitating group membership (Baumeister et al. 2007; Tangney et al. 2004), as the need to belong is one of the most potent human motivations (Baumeister and Leary 1995).

Parallel self-control decisions, then, should provide consumers with a highly diagnostic opportunity for social evaluation. Consumer intuition about this fact could help explain why self-control decisions are influenced by the presence and characteristics of those around us. For instance, van Dellen and Hoyle (2010) find that the mere thought of others high or low in trait self-control can affect participant's state self-control in the same relative direction. Consumers have been shown to adjust their food portions based on the choices and body types of others (McFerran et al. 2010) and may experience resource depletion vicariously (Ackerman et al. 2009). Socially excluded individuals may even make somewhat detrimental consumption choices in the presence of others if they feel that the choice may restore acceptance (Mead et al. 2011). Dzhogleva and Lamberton (2014) provide insight into the decision making process of

dyads who must work together to arrive at a unified self-control decision. Specifically, they found that dyads consisting of two individuals high in self-control were likely to show restraint whereas dyads in which both individuals were low in self-control or one individual was high and the other was low tended to jointly decide to indulge. Essentially, the explanation for mixed dyads' propensity to indulge resides with the very characteristics that allow those high in self-control to be good at relationships—they are more accommodating and willing to compromise their own ambitions for the good of the dyadic relationship (Tangney et al. 2004).

The current work also focuses on dyadic decisions involving self-control based trade-offs, as the aforementioned research suggests that these decisions may be particularly important in evaluating others compared to other decision types. To further underscore our assumptions with respect to this, we conducted a brief pilot study. Undergraduate student participants (n = 104) were asked to imagine selecting their college roommates blindly, based only on their responses to various questions (see appendix for exact stimuli). Participants then saw three sets of questions (two questions each) representing the domains of spending, eating, and sustainability. Each set of questions consisted of one self-control question involving a choice between a virtue and a vice (e.g., spend cash prize on something fun or save it) and one neutral question involving a choice between either two virtues or two vices (e.g., spend cash prize on school expenses or save it). Using 7-point scales, participants rated their level of agreement with statements regarding each question's diagnosticity ("This question would help me figure out if I were going to like someone") and impact on affiliation

based on a shared response ("If a potential roommate were to answer this question the same way I would, I would probably like them more").

The responses for the self-control questions and the neutral questions were averaged across all three sets. Questions involving self-control were seen as more diagnostic ($M_{SC} = 3.17$, $M_{Neu} = 2.67$, $t = 4.75$, $p < .001$) and more impactful on affiliation ($M_{SC} = 3.34$, $M_{Neu} = 2.92$, $t = 5.06$, $p < .001$). Therefore, decisions involving a greater degree of self-control were seen as more socially diagnostic and impactful on perceptions of affiliation. Thus, we focus the remainder of the current work on parallel decisions involving self-control relevant trade-offs.

Parallel Self-Control Decision Outcomes Framework

Generally speaking, for two or more consumers encountering a parallel self-control decision, there are three possible outcome scenarios in response to the tempting situation: both indulge, both abstain, or one indulges while the other abstains. Figure 1 represents a generalization of these different potential sets of outcomes from the perspective of a focal actor (distinguishing therefore between mixed outcomes in which they are the guilty or guiltless party, in terms of indulgent outcomes). From the perspective of one actor in a dyad, misaligned behaviors can take two forms: the actor can abstain while the other person indulges, or the actor can indulge while the other abstains. When a consumer abstains, despite others in the immediate environment indulging (e.g., everyone else is having dessert), we refer to this behavior as "defiant

abstinence." Similarly, a consumer may indulge while others present are abstaining. We refer to persisting with such unaccompanied indulgent behavior as "defiant indulgence." Matched decisions can also take one of two forms. A consumer choosing to abstain in a given situation may very well encounter a peer choosing to do the same, a form of moral support we refer to as "co-abstinence." Similarly, "co-indulgence" is characterized by both an individual and peer(s) ceding to temptation and choosing to indulge.

FIGURE 1

DYADIC FRAMEWORK OF PARALLEL SELF-CONTROL DECISION OUTCOMES

		Peer Decision	
		Abstain	**Indulge**
Personal Decision	**Abstain**	Co-Abstinence (CA)	Defiant Abstinence (DA)
	Indulge	Defiant Indulgence (DI)	Co-Indulgence (CI)

It is worth noting that it is still possible within this framework to observe somewhat disparate behaviors. For example, two individuals may both indulge but to varying degrees. Study 3 starts to examine this more continuous view of indulgence, but

primarily we define matched and mismatched behaviors on the basis of the initial decision to indulge or abstain and suggest further study of the degree of matching once both individuals have decided to indulge for future research. Relatedly, within a group larger than two, there will be variation in terms of the percentage of the group making indulge-versus-abstain decisions, and examining the relevant thresholds and their impact on experienced affiliation is beyond the scope of the current research, which focuses on dyadic behavior.

Matched Self-Control Decisions and Social Affiliation

As for how each of these possible behavioral combinations affect affiliation, it is fair to assume that matched behaviors will result in enhanced affiliation as compared to mismatched behaviors, and as such, the main focus of our analysis is on these matched behaviors. Socially coordinated behavior, even something as simple as non-conscious physical mimicry, supports social acceptance (Chartrand and Bargh 1999). In fact, individuals with an explicit goal of affiliating with others have been observed to mimic one another's behavior (Lakin and Chartrand 2003). Even holding a similar opinion about a product can lead consumers to perceive a bond between themselves and another consumer (Raghunathan and Corfman 2006), and matched parallel self-control decisions involve both mutual positive opinions about a product (in this case, the temptation) as well as a coordinated behavior. However, within matched self-control behaviors, the fact

remains that co-indulgence and co-abstinence are fundamentally different behaviors, each with apparent support regarding their respective social virtues.

Co-abstinence. There are reasons to believe in co-abstinence as a socially superior behavior. For example, the entire notion of moral support and popular peer-support programs such as Weight Watchers hinge on the idea that co-abstinence is beneficial for goal achievement (Moisio and Beruchashvili 2010). Consumers recognize the importance that others play in goal pursuit, including self-control goals, and they feel closer to individuals who are supportive in achieving a desired goal (Fitzsimons and Fishbach 2010). Social support is especially important when it comes to overcoming weaknesses (e.g., illness, Gallant 2003; addiction, Dobkin et al. 2002), heightening the probability of a consumer favorably evaluating a co-abstaining peer. Choosing to abstain may also signal high self-control, an observation that could lead peers to assume many of the previously outlined virtues associated with high self-control individuals (trustworthiness, pro-sociality, empathy, loyalty, etc.).

Co-indulgence. Despite the compelling reasons to suggest the superiority of co-abstinence on social affiliation, other accounts suggest that co-indulgence may similarly have a bonding effect. A sociological study involving adolescents showed that relenting to peer pressure was highly correlated with popularity (Santor, Messervey, and Kusumakar 2000). Similarly, rule-keeping students, the type especially favored by their teachers, were observed to be rather disliked by their less perfect peers, again suggesting

a potentially positive relationship between shared rule-breaking and liking (Wentzel 1994). In other research, Christakis and Fowler (2007) find that obese individuals selectively affiliate with each other, and furthermore, that social networks can actually predict the spread of obesity, suggesting increased affiliation among individuals engaging in similar indulgent behaviors. Further, the positive emotions produced by engaging in a pleasurable hedonic experience may become associated with those individuals sharing the experience (Kendrick and Cialdini 1977) just as shared hobbies and interests draw people together (Wheeler and Nezlek 1977; Aries and Johnson 1983). Finally, recent studies have illustrated how excessive self-control, or hyperopia, can result in negative psychological outcomes such as regret or remorse (Haws and Poynor 2008; Kivetz and Keinan 2006). Interestingly, these research scenarios have typically involved a missed opportunity for social interaction, suggesting that consumers already have a sense of the value of mutual indulgence for bonding experiences.

Severity and the Mediating Influence of Guilt

Given plausible arguments for the affiliation benefits of both co-indulgence and co-abstinence, we seek to identify factors explaining the conditions under which each will be more likely to enhance or decrease experienced affiliation. To do so, we seek to identify the critical moderator of this relationship, as well as the underlying process. Specifically, we propose that the ultimate effect of co-indulgence or co-abstinence on

affiliation depends primarily on the severity or salience of the potential consequences of indulging and the subsequent guilt experienced.

All self-control decisions examined herein would widely be considered "guilty-pleasures," characterized by immediate gratification with delayed costs or consequences (Giner-Sorolla 2001). When using the term "severity" we refer to the decision maker's own subjective assessment of the magnitude of the delayed cost or consequence associated with the indulgence. In general, we might associate behaviors of greater severity with increased guilt, as blowing $10 on a useless purchase has a considerably smaller impact on our budget than does indulgently spending $1,000.

Formally, guilt can be defined as the negative affect arising from an acknowledgement of wrongdoing (Eisenberg 2000). Guilt is related to but distinct from our conceptualization of severity, as severity pertains specifically to the actual costs or consequences while guilt captures the emotional response. Guilt can be a major motivator in decision making, as even anticipated feelings of guilt can influence our decisions (Baumeister, Heatherton, and Tice 1994). The fact that consumers anticipate guilt is particularly important to note as it means that guilt does not only affect co-indulgent experiences, but co-abstinent ones as well, given that avoiding guilt can be a powerful strategy for exercising self-control (Hoch and Loewenstein 1991). Thus, guilt may influence both indulgent and abstinent experiences. In this sense, we examine guilt in a novel manner, by considering how it affects both those who abstain and feel the relief and gratification of avoiding anticipated guilt, and those who indulge and actually

do experience real guilt. Empirically, we show that this approach is effective in explaining the social outcomes of parallel self-control decisions.

In a parallel self-control decision, guilt can be influenced by both the severity of the decision as well as the behavior of a peer. Guilt has been described as a predominantly social emotion that is largely experienced in an interpersonal manner (Baumeister et al. 1994; Tangney et al. 1996). As such, guilt has been shown to indicate disparities between one's own standards and those of a peer, consequently directly impacting affiliation (Baumeister, Stillwell, and Heatherton 1995). In this sense, guilt may affect feelings of affiliation directly by motivating peer-centric cognitions and beliefs about compatibility. Guilt may also affect affiliation by dramatically altering the quality of shared social experiences, which are essential to building relationships (Hardin and Conley 2001). Peer support can improve these shared experiences by providing a buffer against negative emotions serving to both lessen feelings of guilt as well as enhance the positive elements of an experience (Cohen and Wills 1985; Raghunathan and Corfman 2006). Feeling guilty, in the case of indulgence, should harm affiliation, while avoiding guilt, in the case of abstinence, should bolster affiliation.

However, the behavior of a peer in a parallel self-control decision is not the only factor influencing guilt, as the nature of the choices themselves may vary in terms of severity. A behavior with more severe consequences is likely to cause more guilt and produce more intensely dissonant thoughts and feelings (Stone and Cooper 2001) and is less likely to be reinterpretable as acceptable or justifiable behavior (Kunda 1990). In a situation where the threat of guilt from an indulgent opportunity is initially high, it is

more likely that a consumer would prefer moral support rather than feeling pressured by the behavior of a less scrupulous peer (Fitzsimons and Fishbach 2010). Conversely, when the potential guilt stemming from an indulgence is initially low, consumers may prefer the fun, enabling and guilt-alleviating influence of a co-conspirator over the needless guilt-trip induced by the annoying perceived condescension of some goody two-shoes.

While severity is a relative, continuous variable, and the actual affiliation resulting from co-indulgence relative to co-abstinence across severity conditions and dyad decisions will depend both on the difference in severity as well as where along the spectrum of severity the comparisons are made. Therefore, we propose that there will be an interactive effect such that co-indulgence will lead to greater affiliation when severity is lower and co-abstinence will enhance affiliation when severity is higher. As we expect guilt to be influenced by both severity and peer behavior, we anticipate that guilt will mediate the impact of this interaction on the resulting affiliation.

We now test our conceptual framework and predictions in a series of four studies. Studies 1a and 1b examine how differences in severity impact the affiliation experienced within the two forms of matched behaviors, co-indulgence and co-abstinence, testing the moderating effect of severity using two different operationalizations across two distinct domains. In studies 2 and 3, we focus on the entire dyadic self-control decision framework including mismatched behaviors and the role of guilt across high and low severity conditions. In study 3, we examine our predictions using real dyadic interactions and actual behavior, shedding additional

insights into the underlying processes as well as the manner in which severity is perceived by participants in parallel self-control decision making.

Studies 1a and 1b

As matched behaviors are predicted to be the more common outcome of parallel self-control decisions, we begin with two separate studies conducted to examine the moderating role of infraction severity across matched behaviors. That is, studies 1a and 1b test the prediction that when the severity of an indulgence is low, co-indulgence will lead to relatively greater affiliation, and conversely, when the severity of an indulgence is high, co-abstinence will lead to greater feelings of affiliation. To maximize the generalizability of the results, there are key differences between the studies. Study 1a considers the domain of spending while study 1b uses the domain of health/diet. In addition, severity is operationalized as a characteristic of the tempting objects in study 1a (amount spent or not spent) and as a participant-level characteristic in study 1b (current health situation).

Study 1a Method

One hundred and seventy-two undergraduate students completed this study in exchange for course credit. Participants were provided with a hypothetical scenario which involved an indulge-versus-abstain decision and were asked to imagine being in

this scenario themselves. The scenario in this study involved going on a shopping trip with a friend. Both the participant and friend were supposedly on a tight budget but encountered an unnecessary but tempting item that was either relatively expensive (around $50) or relatively cheap (around $5), depending on the condition. In order to make the temptation of personal relevance to each individual, participants were asked to imagine a specific item and to provide both the item and the approximate price. Then participants were either asked to imagine giving in and buying the item while their friend follows suit (co-indulgence), or forgoing the item while their friend does the same (co-abstinence). As such, the study design was a 2 x 2 between-subjects design with parallel self-control decision (co-indulgence vs. co-abstinence) fully crossed with the large or small budget infraction.

Next, participants answered a series of questions regarding how they would feel about this situation. To capture change in affiliation with their friend, participants in this study responded to a measure of social affiliation using a 7-point Likert scale: “Taken completely by itself, this experience would probably make me like my friend…” and the scale was anchored by “much less” (1) and “much more” (7). Participants then completed a 7-point measure of, guilt (“If you were to purchase the item in this situation, how guilty would you feel?” anchored by “Not guilty at all” (1) and “Very guilty” (7)). Finally, respondents completed the 13-item short form measure of trait self-control (Tangney et. al 2004) and reported their race and gender. These individual-level covariates did not significantly affect the results, and we will not discuss them further.

Study 1a Results

The open-ended responses to the infraction severity prompt were reviewed to ensure compliance with the instructions. We found that one participant clearly did not follow instructions. This response was removed from the analysis, resulting in a final sample of 171.

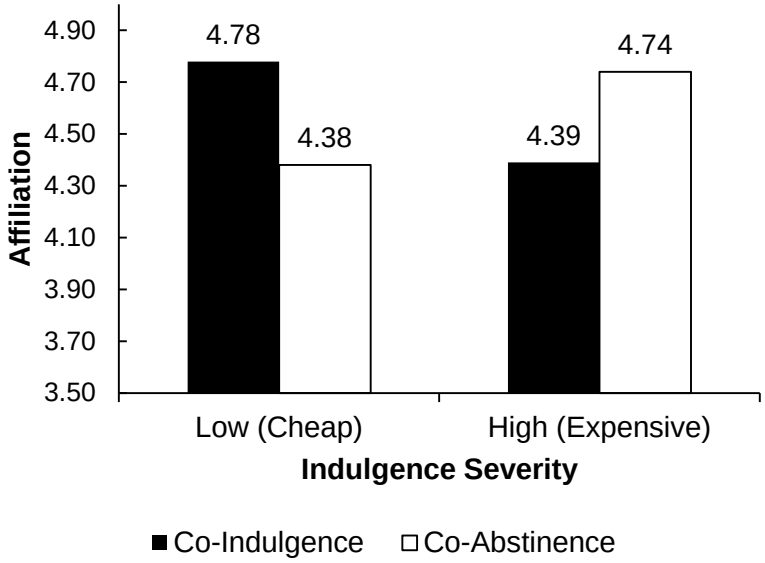
Manipulation check. A manipulation check read, "Purchasing the item in this situation could have very negative consequences," and participants responded using a 7-point Likert scale anchored by "strongly disagree" and "strongly agree." The results show that participants did perceive a significant difference in the potential negative repercussions from indulging in the small (M = 2.66) versus large budget infraction (M = 4.18) conditions ($F(1, 168) = 34.35$, $p < .001$), and therefore the manipulation successfully impacted perceptions of consequence severity. Further, perceptions of severity did not differ based upon the interaction of severity and self-control decision ($F(1, 168) = .431$, NS).

Co-indulgence versus co-abstinence. We tested our prediction that the affiliation benefits of matched decision making would depend upon the perceived severity of the infraction. As such, we conducted an ANOVA on the affiliation measure using co-indulgence versus co-abstinence and indulgence severity as between-subjects factors. The resulting interaction was significant ($F(1, 169) = 7.79$, $p < .01$) such that co-indulgence resulted in higher feelings of affiliation when the indulgence severity was

low (M_{CI} = 4.78, M_{CA} = 4.38), while the opposite was true when the severity was high (M_{CI} = 4.39, M_{CA} = 4.74, see figure 2). Examining the contrasts, the difference between co-indulgence and co-abstinence was significant in the low severity (inexpensive) condition ($F(1, 166) = 4.26$, $p < .05$), while in the high severity (expensive) condition, the difference between co-abstinence and co-indulgence was marginally significant ($F(1, 166) = 3.54$, $p = .06$). The contrasts between severity conditions for co-indulgence ($F(1, 166) = 4.22$, $p < .05$) and co-abstinence ($F(1, 166) = 3.59$, $p = .06$) were also significant (or marginally significant).

FIGURE 2

STUDY 1A: AFFILIATION FROM CO-INDULGENCE VERSUS CO-ABSTINENCE BASED ON SEVERITY



Guilt process. As proposed, we expect guilt to impact the affiliation responses. As studies 1a and 1b only consider matched behaviors, guilt should primarily differ based on the level of severity. ANOVA analysis revealed a significant main effect of severity on guilt (M_{Cheap} = 3.08, $M_{Expensive}$ = 4.04, $F(1, 169) = 13.22$, $p < .001$) but no main effect of behavior type ($F(1, 168) = .408$, NS). In order to more clearly understand the role that guilt plays in this process, we adjust the measure of guilt such that it represents *felt* guilt or the guilt actually experienced by the participants relative to their behavior, given that half of the participants indulged and half did not. Specifically, all participants expressed how guilty they *would* have felt had they indulged, but, of course, only half of the participants actually imagined indulging, while the others imagined avoiding or escaping this guilt via abstention. Empirically, then, because we should expect anticipated guilt to positively affect affiliation for co-abstaining individuals, and negatively affect affiliation for co-indulging individuals, we invert the measure of guilt for those in the co-abstinence condition (i.e. multiply by -1) as their responses can best be understood as guilt avoided. Thus we capture the entire subjective experience of guilt – anticipated and experienced - relative to choice.

An ANOVA on experienced guilt reveals a significant interaction between severity and behavior type ($F(1, 168) = 13.21$, $p < .001$). With this variable we ran a bootstrap analysis to test for mediation (Preacher and Hayes 2004). This experienced guilt significantly mediates the relationship between the interaction variable (co-indulgence vs. co-abstinence and cheap vs. expensive) and affiliation (a_1 x b_1 = -.224, 95% C.I. = -.500 to -.075, $p < .05$). The less guilt a consumer feels, or the more guilt a

consumer avoids, the more socially beneficial a matched parallel self-control decision should be.

Study 1b Method

Participants were 208 undergraduate students participating in exchange for course credit. Participants read a hypothetical scenario involving a free physical examination provided on campus. In the low severity condition, participants were given a clean bill of health whereas the high severity condition showed that they were at risk for developing health problems (see appendix). In both conditions, participants then imagined going out to eat with their similarly healthy or unhealthy friend and being offered a delicious, but unhealthy appetizer. In the co-indulgence condition, the friends decide to splurge and get the appetizer, while in the co-abstinence condition, the friends forgo the appetizer. Participants were then asked to respond to measures of affiliation and guilt as in study 1a, and again completed the self-control scale and provided demographic information, though none of these individual differences were significant and are not discussed further.

Study 1b Results

Eleven participants did not complete enough of the study to have useable data, resulting in a final sample of 197.

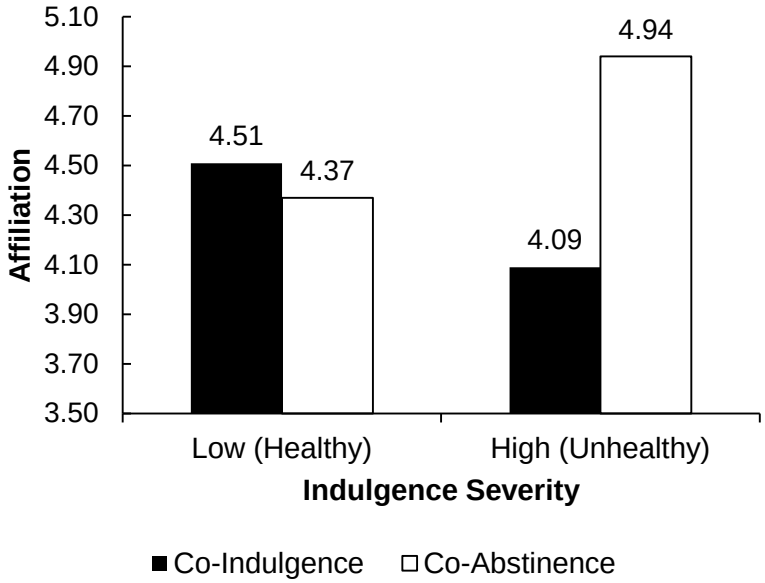
Manipulation check. A manipulation check stated "Getting the appetizer in this situation would have serious negative implications" to which participants responded on a 7-point Likert scale anchored on "Strongly disagree" and "Strongly agree." The manipulation was significant as participants in the high severity (unhealthy) condition anticipated much higher negative repercussions from indulging than did those in the low severity (healthy) condition ($M_{\text{HighSeverity}} = 5.20$, $M_{\text{LowSeverity}} = 2.89$, $F(1, 193) = 112.79$, $p < .001$). Again perceptions of severity did not differ based on the interaction of severity and self-control decision ($F(1, 193) = 1.86$, NS), as such, the manipulation was considered successful.

Co-indulgence versus co-abstinence. An ANOVA on affiliation using parallel self-control decision (co-indulge vs. co-abstain) and severity (healthy (low) vs. unhealthy (high)) as fixed factors resulted in a significant interaction (F (1, 196) = 11.40, $p < .001$), consistent with study 1a. Co-indulgence resulted in higher affiliation in the low severity condition ($M_{\text{CI-LowSeverity}} = 4.51$, $M_{\text{CI-HighSeverity}} = 4.09$; $F(1, 193) = 4.02$, $p < .05$), and co-abstinence resulted in higher affiliation in the high severity condition ($M_{\text{CA-LowSeverity}} = 4.09$, $M_{\text{CA-HighSeverity}} = 4.94$; $F(1, 193) = 7.72$, $p < .01$, see figure 3). However,

in this study, affiliation from co-indulgence is not significantly higher than affiliation from co-abstinence in the low severity condition ($F(1, 193) = .456$, $p > .10$), rather the prominent difference is between co-indulgence and co-abstinence in the high severity condition ($F(1, 193) = 16.30$, $p < .001$). This shift in pattern when compared to study 1a is actually supportive of our theory, as the overall perceived severity of the indulgence is higher in study 1b for both the low and high severity conditions ($t = 2.03$, $p < .05$ and $t = 79.05$, $p < .001$, respectively), and importantly, the key predicted interaction remains.

FIGURE 3

STUDY 1B: AFFILIATION FROM CO-INDULGENCE VERSUS CO-ABSTINENCE BASED ON SEVERITY



Guilt process. Consistent with study 1a, guilt was higher in the unhealthy (high severity) condition as compared to the healthy (low severity) condition ($M_{HighSeverity}$ = 5.21, $M_{LowSeverity}$ = 3.25, $F(1, 192) = 60.08$, $p < .001$), but not significantly different compared across matched conditions (M_{CI} = 4.13, M_{CA} = 4.27, $F(1, 192) = .26$, NS). As in study 1a, we again converted the guilt measured according to choice condition, and thus participants' own subjective experience with guilt again mediated the relationship between affiliation and the interaction of parallel self-control decision (co-indulge vs. co-abstain) and severity (healthy vs. unhealthy; a_1 x b_1 = -.67, 95% C.I. = -1.09.to -.37, $p < .05$), further supporting the predicted process. Guilt incurred diminishes the social benefit of co-indulgence, while guilt avoided improves the affiliation resulting from co-abstinence.

Discussion of Studies 1a and 1b

Regarding the lay theories discussed earlier, support is found for both the viewpoints of Henry Ford and Ralph Waldo Emerson as the effect of matched parallel self-control decisions on affiliation depends largely on the perceived severity of the infraction. Studies 1a and 1b demonstrate that consumers affiliate more with co-conspirators when an indiscretion is relatively small, and more with peers who provide moral support when the stakes are somewhat higher. This result is shown to hold across two distinct domains (spending and eating) as well as two different operationalizations of severity. Finally, the affiliation that participants felt for peers as a result of sharing a

parallel self-control decision is at least partially affected by each participant's own experience with feelings of guilt.

Study 2

As studies 1a and 1b initially examined only matched decisions, the purpose of study 2 was to examine the full dyadic framework by looking at affiliation across both matched and mismatched parallel self-control decisions. In addition, study 2 further examines the role of guilt regarding experience-based changes in affiliation, as a participant's feelings of guilt may now be impacted by both the infraction severity and a peer's decision. Study 2 also uses another unique domain to further generalize results.

Method

Three hundred and twenty two undergraduate students completed this study at private computer stations in exchange for course credit. Participants were asked to imagine being in a situation involving a parallel self-control decision in one of eight randomly assigned conditions representing a 2 x 2 x 2 between-subjects design in which the first factor involved the consequences of ditching class being either mild or severe, the second factor was whether or not the focal actor indulged, and the third factor was whether or not the other person indulged.

The scenario involved two actors, the participant and a roommate, who were ostensibly enrolled together in an early-morning college course (see appendix). They were told that on one particular morning, they were both feeling very tired and were not looking forward to attending class. In the high severity condition, participants were told that attendance was tracked for this class and that there was an upcoming quiz on the day's content. In the low severity condition, participants were told that attendance was not tracked and that there was nothing particularly important going on in class that day. The self-control decision facing the actors was whether to attend class or to instead ditch class and go out to a restaurant together to have breakfast. In the co-indulgence condition, both roommates agree to skip class. In the co-abstinence condition both roommates consider ditching, but decide to attend class instead. In the defiant abstinence condition the participant's roommate decides to skip class, while the participant exercises self-control by attending class. Finally, in the defiant indulgence condition, the participants imagine choosing to skip class themselves while the roommate chooses to attend.

Following these manipulations, participants indicated the impact this scenario would have on their feelings of affiliation with their roommate as well as the level of guilt they expected to experience. These responses were collected using the same measures as in studies 1a and 1b, such that higher scores indicate greater increases in affiliation and higher levels of guilt, respectively.

Results

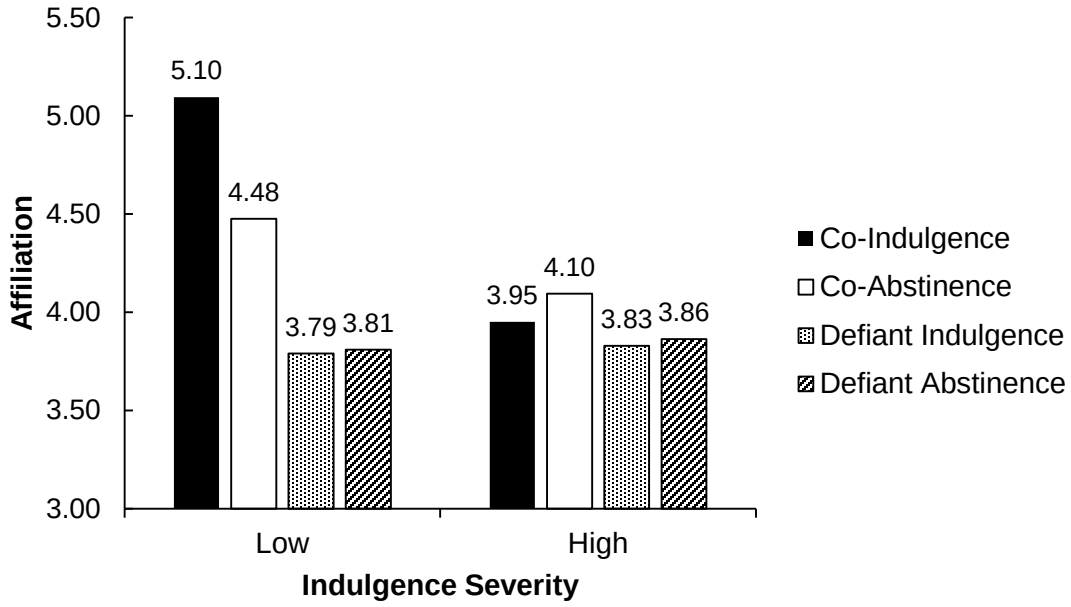
Pretest. In a pretest (N = 50) administered to an online panel of respondents (33 males, 17 females), participants read either the high or low severity scenario and were then asked to rate their level of agreement with the following statement; "Skipping class in this situation would have serious negative repercussions" using a 7-point scale. Analysis revealed that there was a significant difference between conditions ($M_{LowSeverity}$ = 2.48, $M_{HighSeverity}$ = 5.61; $F(1, 49) = 54.04$, $p < .001$), thus the manipulation of severity was considered successful.

Outcomes and severity. To begin, an ANOVA was performed on the measure of affiliation using severity (high vs. low), participant choice (abstain vs. indulge) and peer choice (abstain vs. indulge) as between-subjects factors. The analysis resulted in a significant three-way interaction ($F(1, 318) = 8.776$), $p < .01$), such that in the low severity condition co-indulgence was the optimal behavior (M_{CI} = 5.10, M_{DI} = 3.79, M_{CA} = 4.41, M_{DA} = 4.05; $F(1, 155) = 29.37$, $p < .001$), while in the high severity condition the difference between co-indulgence and co-abstinence was directionally consistent with the notion that high severity leads to greater affiliation with those co-abstaining with you, although this effect did not reach significance (M_{CI} = 3.95, M_{DI} = 3.86, M_{CA} = 4.10, M_{DA} = 3.83; $F(1, 162) = 1.181$, NS; see figure 4). This may be due to the fact that the high severity condition, while relatively distinct from the low severity condition, was not

high enough in perceived severity overall to create a significant bonding experience from co-abstaining.

FIGURE 4

STUDY 2: AFFILIATION BASED ON PARTICIPANT CHOICE, PEER CHOICE AND SEVERITY



As would be expected from prior literature suggesting the benefits associated with matched behaviors (Chartrand and Bargh, 1999), there was also a significant two-way interaction between participant choice and peer choice, such that matched behaviors were more associated with liking than were mismatched behaviors ($M_{Matched} = 4.38$, $M_{Mismatched} = 3.89$, $F(1, 318) = 20.51$), $p < .001$). There was also a significant two-way interaction between severity and peer decision ($F(1, 318) = 6.45$), $p < .05$) and a significant main effect of severity ($F(1, 318) = 12.94$, $p < .001$). The latter effect, as can be seen in figure 4, is driven by lower overall levels of affiliation in the high severity condition ($M_{LowSeverity} = 4.34$, $M_{HighSeverity} = 3.94$).

Guilt process. Next, we examine how guilt, as a part of the experience, affected affiliation resulting from the experience. We begin by examining the impact of severity on guilt in the conditions in which the participant chose the indulgent behavior of sleeping in and skipping class. Severity had a highly significant main effect on guilt ($M_{High} = 5.14$, $M_{Low} = 4.05$, $F(1,156) = 18.19$, $p < .01$) showing, as expected, more guilt associated with the more severe infraction of missing a quiz. Most importantly, however, there was an interaction between severity and whether or not the other person chose to indulge ($F(1, 156) = 17.32$, $p < .001$). In the low severity condition, co-indulging participants anticipated significantly less guilt than defiantly indulging participants ($M_{CI} = 3.46$, $M_{DI} = 4.63$, $F(1, 153) = 10.26$, $p < .01$), where the opposite was true in the high severity condition ($M_{CI} = 5.62$, $M_{DI} = 4.66$, $F(1, 153) = 7.18$, $p < .01$). Thus, feelings of guilt are not only influenced by indulgence severity, but by the decisions of the peers as

well. Relative to indulging alone, participants felt better when they had a partner in a small "crime," but worse when they had a partner in a larger "crime."

Moving beyond the assessments of guilt for just those who indulged, we next considered the role of guilt across both possible participant choices. Looking only at matched behaviors, as in studies 1a and 1b, a bootstrap analysis reveals that experienced guilt mediates the interaction between peer choice and severity on affiliation (a_1 x b_2 = -.46, 95% CI = -.89 to -.10, $p < .05$), supporting the previous process results. In addition, as study 2 included mismatched decisions, experienced guilt also mediated the effect of the full three-way interaction (severity, participant choice and peer choice) on affiliation (a_1 x b_2 = -.62, 95% CI = -1.12 to -.12, $p < .05$).

One key takeaway is that participants experience guilt based on both severity and their peer's decision, typically experiencing more guilt when the consequences are high and when their partner abstains. The mediation is driven by the fact that, for indulging participants, a guilt-laden shared experience reduces the potential for the experience to have a positive social outcome, while for abstaining participants, the greater the guilt avoided, the more that experience facilitated liking.

Discussion

Study 2 demonstrates the effect of severity across the full dyadic framework, providing support for our predictions and for previous studies, especially in the low severity condition. We also find support for the process outlined in studies 1a and 1b while finding initial evidence that the process holds while including mismatched conditions. When facing a parallel self-control decision, both severity and our peer's decisions influence our own feelings or projections of guilt, which in turn can influence our affiliation as a result of that experience.

Study 3

In study 3, we examine the affiliation effects of parallel self-control decisions in a real behavior situation using actual dyads. As we do not restrict choice about whether to indulge or abstain in this study, we can also gain insight into if and how peers affect each other's self-control decisions. In addition, severity is examined in a unique manner.

Up to this point we have treated the decision to indulge as dichotomous (indulge vs. abstain) and primarily fixed at predetermined levels of severity. Often in practice however, severity is best represented by a continuum based upon the quantity of consumption. Rather than examining the focal decision as a binary one, study 3 uses quantity consumed as the key indicator of the extent of severity in a real behavior study using dyads and candy consumption. Quantity thus serves a dual role as both an

indicator of choice (indulge or abstain) and as a natural measure of severity. Therefore, for matched decisions (co-indulgence and co-abstinence), our theory and previous results would predict an inverted-U shaped relationship between the quantities consumed and affiliation, with the greatest quantities (highest severity) actually providing less affiliation than the starting point of co-abstinence. Finally, we examine the combined effects of various severity indicators used in previous studies, including the magnitude of the indulgence itself (studies 1a and 2), characteristics of the perpetrator (study 1b), and characteristics of the decision partner (study 1b).

Specifically, we examine the role of BMI within this real consumption scenario. If we consider that the presence of an overweight individual is likely to make salient the consequences of indulging, and that overweight individuals are seen as a dissociative group associated with overindulging (Bacon, Scheltema, and Robinson 2001), it follows that the BMI of a dyad partner is likely to affect perceptions of the significance of the indulgence. This is also evidenced in work by McFerran et al. (2010) who show that consumers serving themselves food anchor on the amount taken by others preceding them but significantly decrease their choice quantity when the person preceding them is obese.

Method

Participants were 140 undergraduate students who were participating in the study in exchange for course credit. Participants were part of a research session, and dyad partners were seated randomly (care was taken to ensure that people arriving together were not matched in dyads) spaced out in a behavioral lab. All dyads were unobtrusively matched on gender as they entered the behavioral laboratory to control for any cross-gender effects that might be associated with food consumption differences (Wardle et al. 2004).

After participants were seated, but before the study began, the study administrator indicated to all study participants who their respective partners would be, though no contact or conversation between the participants took place. Each participant then completed a three item measure of social attractiveness (McCrosky and McCain 1974) to indicate their initial feelings of affiliation for their study partner including "I think he (she) could be a friend of mine," "I would probably enjoy their company," and "It would be difficult to get along with them" (reverse scored), which were averaged (alpha = .69) and used to assess affiliation. This measure of affiliation was used in study 3 as it represents a more appropriate measure for a real-life interaction (McCrosky and McCain 1974). This initial measure provided a baseline measure to be used to directly ascertain the *change* in perceptions based on the shared experience they were about to have.

Following this, participant pairs were moved to an adjacent interview room with a large TV screen. Participants sat opposite their dyad partner at a table that ran perpendicular to the screen. In the middle of the table was a bowl filled with individually wrapped miniature chocolate candies which we pretested as both highly desirable and indulgent. Participants were told that the study would begin with a 10 minute video, and that they were welcome to eat as many of the candies they wished during the video. The video shown was a short fictional drama about a man struggling with memory loss. The lab administrator told participants that, since he/she would not know when the film had ended, that they were simply to return to their lab stations at the conclusion of the film. A lab administrator observed via hidden camera and made note of not only whether or not participants indulged, but the quantity eaten by each participant and which of the participants ate first in co-indulging dyads. Because our goal was to minimize the potential actions that could impact subsequent ratings of affiliation, the dyadic interactions did not involve any conversation or interaction other than watching the video and potentially eating the candies.

After watching the video, participants returned to their computer stations and were asked several questions about their experience with the film. These questions were not relevant to the purpose of the study, but were intended to reduce suspicion. Participants were probed for suspicion about the purpose of the study, and the study then ostensibly concluded.

Participants were then told that they may be completing additional tasks with their partner from the film study, but that researchers first wanted to know the

participant's opinion about their partner. They then completed the same three-item affiliation measure for a second time, as well as a two item measure of guilt, one item asking "How guilty do you feel about the candy that you ate?" (or "How guilty do you think you would you have felt about eating the candy?", depending on their own indication of whether they had eaten any candy) and a second item asking how "bad" it would have been for them to eat (more) candy (r = .85). Participant height and weight were collected for BMI calculations. In addition, individual measures were taken including gender, race, and trait self-control (Tangney et al. 2004). None of these individual measures significantly affected the outcome and will not be discussed further. Finally, participants were asked if they had any previous familiarity with their dyad partner and were again probed for suspicion about the purpose of the study.

Results

Although participants were seated randomly, 4 of the 70 dyads reported having a high level of familiarity (6 or 7 out of a 7 point scale) and previous affiliation. However, the inclusion of these dyads did not affect the results of the analysis, and they are included in all analyses. One dyad participated in the shared experience, but did not complete enough of the subsequent measures to have usable data, resulting in a final sample size of 138.

Participants who indulged consumed an average of 2.25 candies each with a standard deviation of 1.69 (Min =1, Max =9). The order in which the participants consumed was not significant in any of the analyses and is not discussed further.

Matched decisions were the dominant outcome, with 31 dyads co-abstaining, 23 dyads co-indulging, and 15 mixed-decision dyads. A binary logistic regression shows that participant's choices appeared to be heavily influenced by those of their partner (β = 2.54, Wald χ^2 = 37.07, $p < .001$). Not only did partners influence each other's decisions to indulge or abstain, there was a strong tendency for partners to consume similar quantities (r = .601, $p < .001$). Over half of the dyads (36 of 68) consumed exactly the same amount of candies, 56 dyads (82%) either matched quantities or only mismatched by 1 candy and 63 of the 68 dyads (92%) were within 2 candies of each other. As such, these findings suggest a rather strong tendency towards matching behaviors in terms of not just the indulge-versus-abstain decision, but also for the quantity of indulgence.

The effects of severity as quantity consumed on affiliation. To appropriately analyze the dyadic nature of this data, we utilized an Actor-Partner-Interdependence-Model (APIM) regression model to address the distinct possibility of non-independence of data in dyadic studies, as observations and scores may be influenced by dyad partners. As such, we use methods outlined by Kenny, Kashy, and Cook (2006) for analyzing non-independent dyadic data and suggested by Simpson et al. (2012) for improving the analysis of joint decision making in consumer research. In the APIM (Cook and Kenny 2005), the authors suggest an admittedly liberal $p = .20$ as the minimum cutoff point

beyond which interdependence need not be assumed (Myers 1979). The inter-dyadic correlation of affiliation scores was significant for both pre-experience (Pearson's r = .20, $p < .05$) and post-experience measures (Pearson's r = .26, $p < .01$), so we proceeded to analyze the data using techniques accounting for non-independence in which we nested the individual actor and partner measures at the dyadic level and analyzed the data using a multilevel regression analysis.

Specifically, the APIM model including the effect of participant quantity and peer quantity on the post-video measure of affiliation shows a significant main effect for participant quantity ($\beta = 0.20$, $t = 2.13$, $p < .05$), a non-significant main effect for peer quantity ($\beta = 0.10$, $t = 1.03$, $p > .10$) and a significant interaction ($\beta = -0.07$, $t = -2.01$, $p < .05$). However, a more sensitive measure of the impact of the shared consumption experience is the change in affiliation from the first, pre-video measure of affiliation to the second, post-video measure (Allison 1990; Lakin and Chartrand 2003). In addition, this measure is better able to establish causality. Therefore, the rest of our analysis will focus on this outcome variable.

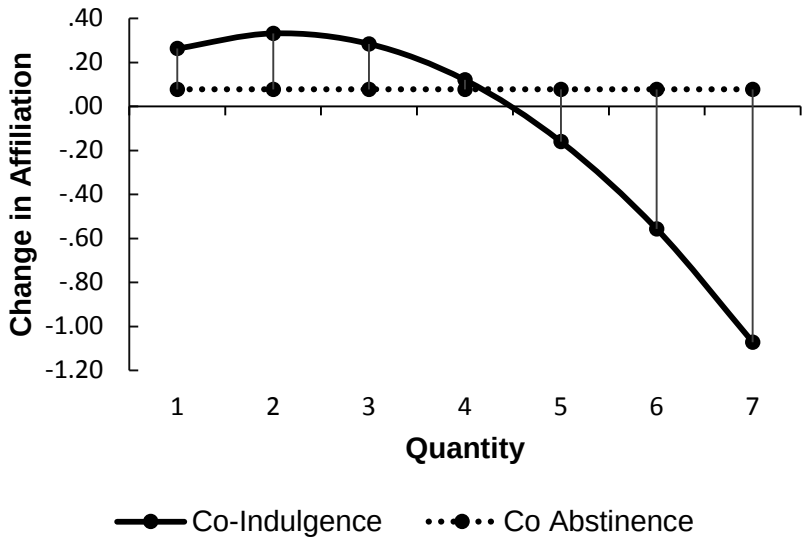
An APIM regression substituting *change* in affiliation as the dependent variable was also significant, showing a marginally significant main effect of peer quantity ($\beta = 0.151$, $t = 1.97$, $p = .051$), a non-significant main effect of participant quantity ($\beta = 0.09$, $t = 1.24$, $p > .10$), and a significant interaction of participant quantity and peer quantity ($\beta = -0.06$, $t = -2.19$, $p < .05$). As nearly 80% of the dyads resulted in matched decisions, figure 5 depicts the effects of quantity on co-indulgence relative to the starting point of co-abstinence. Calculating the change in affiliation (assuming equal amounts consumed

by both partner and peer for the purpose of charting the results) we see a clear inverted-U pattern emerge (see figure 5). Consistent with previous studies, co-indulgence produces more affiliation when severity (quantity) is relatively low, but less affiliation as the quantity increases. As quantity increases to a point well beyond the mean quantity observed (7), co-abstinence becomes vastly superior. This primary effect supports the results involving severity from previous studies.

We also wished to again examine the role of guilt as the prior studies in our real behavior context. The interaction of participant quantity and partner quantity reveals significant main effects of participant quantity on the index of one's own feelings of experienced guilt ($\beta = 1.70$, $t = 8.29$, $p < .001$) and a main effect of partner's quantity on experienced guilt ($\beta = 1.19$, $t = 5.69$, $p < .001$) and a significant interaction between the two ($\beta = -.42$, $t = -5.77$, $p < .001$). Together, this pattern reflects greater guilt for higher quantities when consuming alone, greater *projected* guilt for higher peer quantities when defiantly abstaining, and reduced feelings of guilt for consuming the more a co-indulging peer eats. More importantly, the aforementioned interaction between participant quantity and peer quantity on affiliation is mediated by these feelings of guilt ($a_1 \times b_1 = -.009$, 95% C.I. = -.024 to -.001, $p < .05$), a real behavior result consistent with the previous studies. This bootstrap analysis was appropriately performed accounting for the dyadic structure of the data (Kenny, Cashy and Cook 2006).

FIGURE 5

STUDY 3: CHANGE IN AFFILIATION BASED ON QUANTITIES CONSUMED FOR MATCHED BEHAVIORS



Additional contextual effects related to BMI. While quantity eaten is the more obvious determinant of perceived severity in this study, it is possible that the BMI of the peer is a contributing factor enhancing the salience of the severity of overeating (McFerran et al. 2010). Furthermore, there may also be an impact of one's own BMI, or even relative BMI on the affiliation that results from such a shared experience. To explore this possibility, a more exhaustive factorial APIM model regressing change in affiliation on 1) peer quantity, 2) participant quantity, 3) peer BMI, and 4) participant

BMI is employed. Also, to transform for the non-linear (inverted-U) effect of quantity consumed, squared terms of quantity for both participant and peer are included in the model.

The resulting model contains several notable significant results (see table 1). To begin, the four-way interaction between BMI, peer BMI, participant quantity and peer quantity is significant. In addition, most of the underlying two-way and both of the three-way interactions are also significant. To describe the nature of these effects, we focus on highlighting patterns of results at meaningful points of interest (Spiller et al. 2012) using our proposed marker of severity (quantities consumed) and BMIs. As nearly 80% of dyads ultimately matched their behaviors, we also focus our discussion primarily on matched behaviors.

TABLE 1

STUDY 3: REGRESSION RESULTS FOR CHANGE IN AFFILIATION FROM PARTICIPANT QUANTITY, PEER QUANTITY, PARTICIPANT BMI AND PEER BMI

	Regression 1: Change in Affiliation			**Regression 2: Change in Affiliation**			
Predictors	**β**	**SE**	**t-stat.**	**β**	**SE**	**t-stat.**	**p-value**
Intercept	.065	.095	.683	-4.70	6.69	-0.70	.485
Participant quantity (Q)	.095	.074	1.28	4.26	4.49	0.95	.344
Peer quantity (PQ)	.163	.075	2.16*	12.05	4.40	2.74	.007
Q x PQ	**-.054**	**.024**	**2.27***	**-3.71**	**1.30**	**-2.85**	**.006**
Participant BMI (BMI)				0.18	0.28	0.66	.512
Peer BMI (PBMI)				0.19	0.28	0.70	.487
Q x BMI				-0.17	0.19	-0.92	.357
Q x PBMI				-0.20	0.19	-1.09	.280
PQ x BMI				-0.49	0.19	-2.61	.010

TABLE 1 CONTINUED

	Regression 1: Change in Affiliation			Regression 2: Change in Affiliation			
Predictors	**β**	**SE**	**t-stat.**	**β**	**SE**	**t-stat.**	**p-value**
PQ x PBMI				-0.47	0.18	-2.61	.010
BMI x PBMI				-0.01	0.01	-0.65	.518
Q x PQ x BMI				0.16	0.06	2.83	.006
Q x PQ x PBMI				0.15	0.05	2.86	.006
Q x BMI x PBMI				0.01	0.01	1.10	.275
PQ x BMI x PBMI				0.02	0.01	2.53	.013
Q x PQ x BMI x PBMI				**-0.01**	**0.00**	**-2.78**	**.007**
Q^2				-0.04	0.02	-1.72	.089
PQ^2				-0.04	0.02	-2.37	.020

*$p < .05$

Q = Participant Quantity

PQ = Peer Quantity

BMI = Participant BMI

PBMI = Peer BMI

The effects of BMI. To isolate the effects of BMI we hold quantities for co-indulgence at 2 – a point just below the average quantity observed in this study (Mean = 2.25). We chart both participant and peer BMIs at three different peer and participant BMI levels – low normal (19), average normal (22), and high normal (25) (see figure 6). Respectively, these three BMIs closely represent the widely accepted boundary between "underweight" and "normal weight," a "normal" BMI, and the boundary between "normal weight" and "overweight." Again, these cutoffs are used as meaningful points of examination following Spiller's recommendation (Spiller et al. 2012). For context, the average BMI in this study was within the normal range (Mean=24.08).

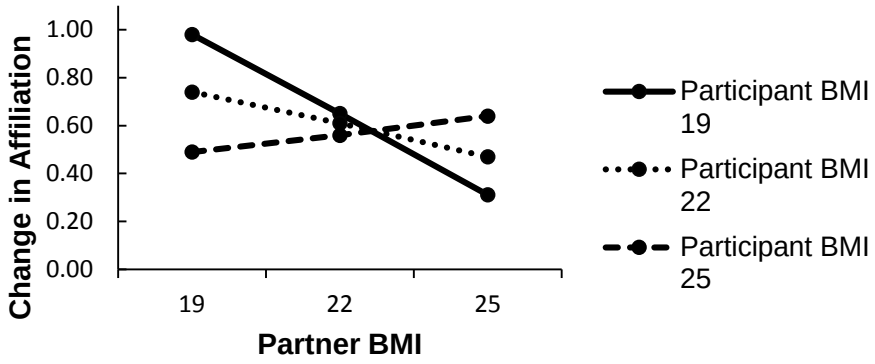
For lower-BMI and normal BMI individuals, increasing peer BMI seems to reduce the affiliation derived from co-indulging (see figure 6, panel A). However, for higher-BMI participants, we see a slight increase in affiliation as peer BMI increases. It could be, then, that heavier participants are actually made more aware of their own weight issues as they are paired with fitter individuals, making the consequences of indulgence more salient. Co-abstinence was increasingly socially beneficial as peer BMI increased (figure 6, panel B), although this was much more pronounced for thin and normal BMI participants. Higher BMI produced a greater preference for peers who mutually abstained.

As a final look into the role of BMI, we consider the effects alongside those of quantity. Quantities of one candy (representing the minimum quantity when consuming) and six candies (representing a large, but plausible quantity) are used for the low and high severity conditions, respectively. Holding participant BMI at an average level of 22,

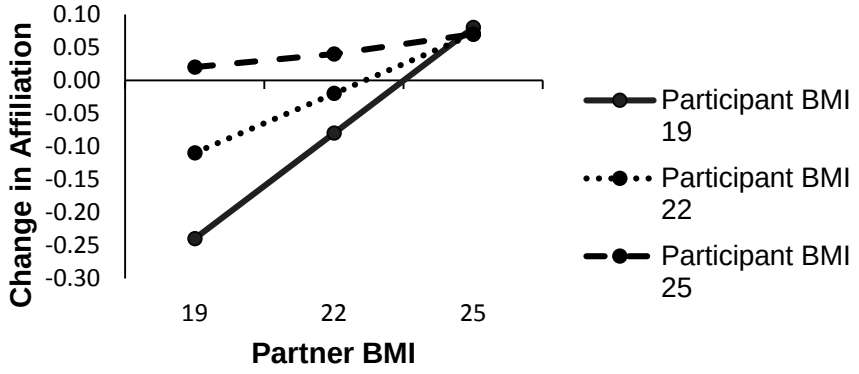
we set peer BMI at a lower level of 19 and at a relatively higher level of 25 to examine the effects based upon peer body size. Plotting the results using the regression inputs at these points (see figure 7), we again see co-indulgence as the superior behavior in the low severity condition, and co-abstinence as the superior behavior in the high severity condition. The one element that is inconsistent with previous results is that defiant behaviors are generally more positive than would have been predicted. While there are multiple possible explanations for this, it is perhaps most useful to recognize the fact that in this real behavior study, cases of mismatched behavior were dominated by matched behavior cases (15 to 54). Because of the small number of mismatched cases, the removal of one outlying mismatched dyad actually shifts the means for change in liking squarely in matched behavior's favor. The fact that change in liking rather than overall liking is being measured may also account for part of the difference. The pattern for matched behaviors is consistent with previous results. As such, we provide some insights into the role of size and relative size of the members of the dyad within parallel self-control decision making.

FIGURE 6

STUDY 3: CHANGE IN AFFILIATION FROM A) CO-INDULGENCE (QUANTITY = 2) AND B) CO-ABSTINENCE (QUANTITY = 0) ACROSS LOW, MEDIUM, AND HIGH AVERAGE BMI LEVELS



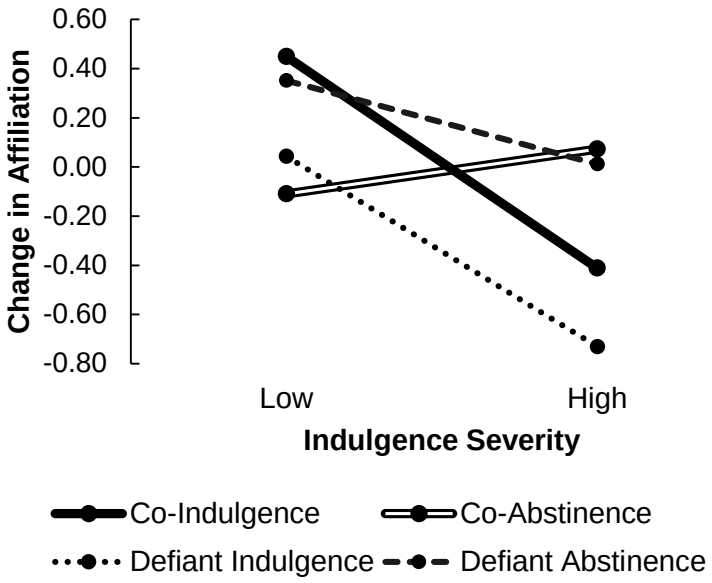
PANEL A (CO-INDULGENCE)



PANEL B (CO-ABSTINENCE)

FIGURE 7

STUDY 3: CHANGE IN AFFILIATION BASED ON HIGH AND LOW SEVERITY



NOTE: This figures depicts the effects of both quantity consumed (peer and participant) and BMI (peer and participant) jointly. Quantities of one candy and six candies are used to estimate the low and high severity conditions, respectively. For BMI, we focus on relative BMI by holding participant BMI at 22 and setting peer BMI at 19 in the low severity condition and 25 in the high severity condition.

Discussion

Overall, study 3 provides valuable support for our predictions by allowing dyads of peers the opportunity to face a real parallel decision about whether or not to indulge.

We find that peers do influence each other's self-control decisions, such that consumers showed a natural inclination to match decisions with their peers. Further, quantity, as an indicator of severity, did indeed demonstrate a non-linear, inverted-U shaped relationship with liking, such that a little indulgence is good, but "less is more" as it affects affiliation between consumers. This effect is again mediated by feelings of guilt. We also note further evidence of the robustness of our results using real behavior. Specifically, we replicated the pattern of results in study 3 in a separate real-consumption study in which we focused on the decision to indulge as a yes or no one rather than allowing for a wider range of consumption quantity. Using a procedure similar to study 3 but allowing for mixed-gender dyads (n = 96) and including only a post-experience measure of liking (as in studies 1-2), the pattern of results again supported our predictions. The results were also quite robust, remaining significant even when accounting for any or all of participant race, race combinations, participant gender, gender combinations, and familiarity.

In addition, study 3 also explores real differences in BMI as an additional influence on parallel self-control decision making. Participants with higher BMIs, perhaps naturally more self-conscious with respect to eating, increasingly rely on their own BMI relative to their peers as an influential factor in determining the potential consequences of their behavior rather than simply assessing the health of their peer. Finally, simultaneously accounting for both participant and peer BMI and quantity consumed allowed for a detailed examination of the role of severity as well as other

important contextual factors on affiliation in a real behavior context in which decisions represented co-indulgence, co-abstinence, defiant indulgence, and defiant abstinence.

General Discussion

It seems that both Ford and Emerson were right to some extent. Consumers do want help avoiding the major pitfalls that cross their paths, but they also want to be allowed to sometimes let their guard down and enjoy life without feeling like they are the only imperfect person in the room. Accordingly, the purpose of this research was to begin to understand consumer interaction in what we term parallel self-control decisions. We propose a framework for exploring the impact of self-control related actions within dyadic contexts and introduce the concepts of co-indulgence and co-abstinence as well as defiant indulgence and defiant abstinence. Through four studies we illustrate how consumers may bond through both indiscretion and propriety. Specifically, we begin to resolve our earlier Henry Ford / Ralph Waldo Emerson conflict, showing that consumers can indeed bond through both "bring(ing) out the best" in each other, and being "stupid" together. In essence, we prefer friends who help us enjoy life responsibly. The key moderating variable that distinguishes when co-indulgence or co-abstinence is best is the relative severity of the indiscretion, and these affiliation outcomes are driven by feelings of guilt either encountered or avoided. Guilt is affected not only by what we do, but by what others do. We prefer to be with others who help us maximize our pleasure while

minimizing our guilt – by either being complicit in our indulgence or by supporting our abstinence.

Contributions and Implications

The present work contributes to the literature in several ways. To begin, it furthers our understanding of self-control. Although they are a common occurrence, this is one of the first articles that we are aware of to explore self-control decisions in dyads, and specifically under conditions in which each person is making a decision for his or her own individual behavior, that is a "parallel self-control decision." Our pilot study highlights the importance of such decisions, underscoring the perceived diagnosticity of other's self-control related decision making. While there has some research showing the social hazards of indulgence (Baumeister et al. 2007), we demonstrate that self-control failure can actually be of social benefit, and we highlight the conditions under which this is true. Interestingly, our research demonstrates a reversal in outcomes based on whether an indulgence is perceived to be relatively more or less severe. Relatedly, we examine various circumstances that can enhance the perceived severity of our actions and thereby change our perceptions of another who indulges or abstains with us and well as the role of guilt in explaining our perceptions of others. In addition, our approach to examination of guilt as consisting of both anticipated and experienced guilt is also unique and may prompt new exploration of the relationship between anticipated and experienced emotions.

Next, our findings contribute to prior research in social influence and consumption as well as joint decision making more generally. Beyond word-of-mouth or observational learning (Chen, Wang, and Xie 2011), we demonstrate how the presence of others and their decisions can affect not only our choices but the subjective experiences and social outcomes that stem from those choices. In this manner, we also add to the literature on shared experiences. While we know that a shared experience is fundamentally unique and can affect our product evaluations (Raghunathan and Corfman 2006), we show ways in which shared experiences (through parallel self-control decision making) also affect consumer-to-consumer relationships. As dyadic decision-making has recently been highlighted as an understudied area of consumer behavior (Simpson et al. 2012), we add to this literature through examining shared, but individually made self-control relevant decisions.

We also help to further understanding of the interplay between self-control decision making and social influence. We present and begin exploring a concise and useful theoretical framework while expanding beyond personal decisions made in the presence of others (Ackerman et al. 2009; McFerran et al. 2010; van Dellen and Hoyle 2010) to scenarios involving two individuals both faced with the same self-control relevant decision. In many ways, our research addresses the issue of pursuing multiple goals and the justifications that lead us to view one goal more or less focal in a given situation, in this case in the presence of another goal pursuer or detractor. As Dzhogleva and Lamberton (2014) find, high self-control individuals making a joint self-control decision with a low self-control individual were likely to agree on indulgence. Similarly,

we find evidence of a general tendency for peers to ultimately match behaviors when facing a mutual temptation. This research helps illuminate the reasons why, as social goals likely take priority in many situations.

From a practical standpoint, our findings are useful for marketers, policy makers, and consumers alike. Marketers can apply these findings to inform a number of important decisions related to promoting goods perceived as indulgences. Knowing that consumers prefer partners in crime when indulging on a small scale can inform decisions regarding communication strategies and messages, as well as promotional offers, perhaps by using a "friends and family" type of approach. For example, when selling small or "fun" indulgences it is likely that group events (i.e. Mary Kay's "Girls Night") or group discounts (to amusement parks, movies, etc.) may be effective. Furthermore, the social bond experienced between people who enjoy the same small indulgences highlights the importance of facilitating brand community interaction and helps explain the potentially strong feelings of affiliation experienced among community members (McAlexander, Schouten and Koenig 2002). On the other hand, knowing that as the perceived severity increases, so too do the social benefits of mutually abstaining can inform public policy makers who seek to influence such behaviors as overspending, drug use, or overeating. Finally, this work may be useful for consumers as they seek to navigate goal conflict and self-control decision making in social settings. Specifically, our findings provide insights into how consumers can most effectively use others for accountability in trying to achieve important goals, while potentially enhancing their

well-being through managing guilt and being able to enjoy smaller indulgences in the company of friends.

Future Research and Conclusions

As this work represents one of the initial pieces of research on the topic of parallel self-control decisions, numerous possible extensions and future research directions remain. For example, this research focuses primarily on matched decisions. While we believe this to be the most common outcome (as underscored by the results of studies 3), other combinations of behaviors from our framework provide additional interesting research questions. For example, more clearly understanding the differences between the two types of mismatched behavior is also an interesting question for future research, as well as circumstances under which these mismatches may be superior to matched behavior. In studies 2 and 3, we find initial evidence that defiant abstinence on the part of participants results in some of the lowest levels of affiliation between actors. Exploring this effect further and truly understanding the dynamics underlying defiant abstinence and defiant indulgence requires additional research.

Another relevant question regarding mismatched behaviors regards the factors and circumstances that are most likely to lead to mismatched outcomes. For example, while relative BMI affected the outcome of the decisions in study 3, there was no evidence that it affected the decisions themselves. Both the antecedents and consequences of mismatched behaviors merit further investigation. Furthermore, the

question of whether behavior is “matched” versus “mismatched” is primarily operationalized here as a function of the actors’ choices to indulge or abstain. More exploration could, however, be devoted to better understanding scenarios in which multiple individuals indulge but to very different degrees. When one consumer indulges a little while another indulges a great deal, the affiliation experienced between the two could be diminished. We did not see such divergence within the present study 3, but given the fairly limited opportunity for large discrepancies in consumption in this context, it would be worthwhile to further examine matches and mismatches in the extent of consumption in future research.

Throughout our studies, we operationalized severity in several unique ways. There are potentially many different ways through which perceived severity may be affected. Studying conditions that change perceptions of severity is an important future direction for research due to the implications severity holds for the outcomes of parallel self-control decisions or goal-directed behavior more generally. Also, because severity is a relative, continuous variable it would be beneficial to better understand various thresholds for severity and its effects—for example, extreme levels of severity could make co-indulgence once again enhance affiliation (e.g., actually being in jail together). Similar to the findings of motivated categorization with respect to what is perceived as an indulgence or a necessity (Poynor and Haws 2009), it is likely that there may be systematic differences in perceptions of severity across individuals that would influence parallel self-control decision making. When the stakes are high for one consumer, but more trivial for another, this presents a more complex parallel self-control scenario not

addressed in this research. Understanding the role of others who have more or less at stake in the same situation is an important avenue for future research.

Another factor that could impact the affiliation experienced in these joint self-control decisions is the order of indulgence. In studies 1-2, this was left ambiguous and in study 3 it did not affect our results. However, given larger samples of co-indulging consumers, it may in fact be that who indulges first matters. Understanding such dynamics is an interesting avenue for future research. Whom is more likely to bring another down?

From a marketer's standpoint, the impact of a participating peer on product experience is of particular interest. Is indulgence a dish best served for two or best consumed alone? Sharing a pleasurable experience with another person does appear to heighten the pleasure derived from the experience for both parties if opinions about the product are congruent (Raghunathan and Corfman 2006). If, however, a consumer chooses to indulge but their peer does not, there is an evident conflict of opinions, which should deflate the subsequent experience for the indulging consumer through heightened feelings of guilt (Baumeister et al. 1994). As such, it would be interesting to observe the downstream consequences of co-indulging as it relates to product evaluation and future purchase intentions. Additional insights could also be gained by examining the downstream consequences of the relationships themselves—do consumer end up resenting others who bring on social pressure to cave and indulge or actually like them more over time for the support or even "tough love" that they provided? What happens as such scenarios repeat one another?

Finally, our studies primarily involved familiar individuals, or at the very least, similar individuals (as in study 3: all were students enrolled in the same marketing course). Although we are most likely to be faced with self-control decisions with others that we know, it is useful to consider the role of familiarity of the other person within our dyadic self-control decision-making framework. The difference that a shared experience makes on affiliation is likely to vary depending on the previous level of familiarity a consumer has with a peer. For example, a parallel self-control decision made with a relative stranger essentially constitutes a first impression, and first impressions typically influence our appraisals more than subsequent interactions (Nisbett and Ross 1980). On the other hand, because friends are generally more influential, (Latané 1981), the effects of moral support may differ from friends to strangers (Janis 1983). Future research should systematically address different levels of familiarity among participants and how this impacts judgments of similarity, affiliation, and the experience of guilt. Additionally, there may be interesting cross-gender effects that could be explored in more detail. Overall, these individual differences were touched upon but remain primarily outside the scope of this initial work on parallel self-control decisions.

In summary, there are many potential future directions that stem from this research. So much consumer decision making occurs in the presence of others, and it is important that researchers continue to develop and test theory that is applicable to more than consumers operating in isolation. This research recognizes that consumer decision making has both human influences and human consequences and begins to explore how consumption decisions affect human ties and relationships.

ESSAY 2: CONFESSION: A PRELUDE TO REPENTANCE OR RELAPSE?

"There is a luxury in self-reproach. When we blame ourselves, we feel that no one else has a right to blame us. It is the confession, not the priest, that gives us absolution."

- Oscar Wilde

Synopsis

Keeping secrets isn't easy, even when that secret might reflect poorly on its keeper. As social beings some part of us seems intrinsically motivated to open up and confess mistakes we have made, even when embarrassing or otherwise damaging. While there may be many reasons one might choose to disclose one's "sins," we know very little about what confession actually *does*. This work examines confession in the context of self-control failures, asking the central question: is confession licensing or reinforcing for subsequent self-control decisions? Across 4 studies, we find that confessing high-guilt events boosts self-control, such that participants were less likely to indulge following such a confession, while confessing relatively low-guilt indiscretions results in a classic licensing effect.

Introduction

Confession is an age-old practice, and in some ways it seems to be more prevalent than ever. Twitter, facebook, Reddit, and other social media sites are common confession venues. Dozens of dedicated online "confession sites" serve as venues for consumers to publicly disclose their various faults and failures. Confession is still a common religious practice, an integral part of addiction recovery programs, a regular part of law enforcement and a popular topic of tabloids and daytime talk shows. Whether it is a formal religious confession, a legal confession, an online posting of guilt or a commonplace, simple confession to a friend or stranger, confessions are an almost daily encounter for many consumers.

Naturally, many confessions regard failures in self-control. As consumers strive to achieve goals in various aspects of their lives, they are likely to at times stray from the path leading to ultimate success. Recent research (Zemack-Rugar, Corus and Brinberg 2012) highlights the unique characteristics associated with how people respond to self-control failure. Similarly, we examine the role of confession in responding to lapses in self-control in a consumption-related context. Specifically, we examine how the act of confession following a self-control failure affects future goal directed behaviors. Once one has stumbled, what impact does confessing one's "sins" have on subsequent goal-directed decisions?

On the one hand, confession may serve to enhance commitment to the goal that has been compromised. Confession could potentially act as a type of public

commitment, which would suggest greater future adherence to the goal (Kiesler 1971; Cialdini et al. 1995). On the other hand, confession may serve as a way to reaffirm one's moral identity, which could have a licensing effect and actually lead to more indulgent decisions in the future (Sachdeva, IIiev and Medin 2009). We suggest that confession may result in either licensing or reinforcement, and that feelings of guilt regarding the trespass being confessed serves to moderate the effect of confession on downstream behavior. Specifically we predict that confessing a high-guilt infraction serves to reinforce future adherence to a goal or standard, while confessing a low-guilt indiscretion creates licensing effect and undermines future goal commitment. We first develop this theory in depth and then present 4 studies that support these claims.

The Practice of Confession

To confess simply means "to tell or make known (as something wrong or damaging to one's self)", or "to disclose one's faults" (Merriam Webster Online Dictionary). To "confess" typically means to admit or to make known a fault or wrongdoing, especially something about which one feels ashamed or embarrassed. While the term "confession" can sometimes apply to opening up about traumatic events or other potentially harmful or embarrassing truths beyond one's control (Pennebaker 1989), we focus on confession as it applies to decisions that represent failures of self-control (Giner-Sorolla 2001).

It is perhaps difficult to understand why anyone would voluntarily divulge information regarding their own behavior that could be harmful or embarrassing. However, confession is, in fact, a somewhat instinctive way of confronting and dealing with the negative emotional and social consequences of self-control failures, and it has proven benefits. Failure to self-regulate is frequently accompanied by negative emotions such as guilt or regret and while such feelings can actually motivate confession (Tangney 1995), suppressing these negative emotions is a rather stressful and difficult task (Butler et al 2003). Confession can help the confessors to make sense of the event in question (Kelly 1996) has been shown to actually improve health and feelings of calmness (Pennebaker 1989, 1990). Though not in the domain of self-control failures, students who confessed traumatic events were less likely to visit a student health center in the months following the confession relative to students who recalled but made no confession of such events (Pennebaker 1989). Confession has also been shown to facilitate forgiveness if it is perceived to be thorough and sincere (Weiner et al 1991). If confession, then, is a way of dealing with guilt or attempting to protect social wellbeing, it remains unclear what the effects of confession on subsequent behavior would be. Does confession increase or decrease the likelihood of the "sin" reoccurring in the future? Confession could be viewed as sufficient penance or it could represent a clean break from the behavior. There are arguments that could be made for confession both as a licensing or a reinforcing event, which we review next.

Confession and Commitment

If confession serves as a reminder of the inconsistency between one's behavior and social expectations of behavior, the dissonance-reducing behavior would be to heighten resolve in subsequent self-control decisions (Spangenberg et al. 2003). Confession could be essentially the same as a statement of intent to exercise greater self-control in the future, which could lead to greater consistency with the stated intent (Morwitz, Johnson, and Schmittlein 1993).

Confessing one's missteps could well serve as an act of public commitment, which we should expect to heighten goal commitment (Cialdini 1993). Public commitment has long been associated with behavioral consistency, as people tend to have an innate desire to be consistent in their behavior (Cialdini et al 1995). For example, smokers who publicly committed to quit smoking were more likely to successfully adhere to that goal (Altman et al. 1987). If confession serves as either a self-signal of high goal commitment or a reminder of lack of goal progress, it could also further motivate goal adherence (Koo 2008).

Indeed, it is self-presentation that is at the core of a robust body of literature showing that a "transgression" is often followed by an increased willingness to help (Tedeschi and Riordan 1981). Interestingly, participants in these studies seem to prefer to help third parties, unaffected by the transgression (Carlsmith and Gross 1969; Freedman et al 1967), suggesting that it is not only about repairing damaged relationships, but about restoring self-views and perhaps social acceptance in general.

However, when a transgression was followed by a confession, there was reduction in the perceived need to make amends (Wallace and Sadalla 1966), thus, we must also consider the potential of confession to create a licensing effect

Confession and Licensing

If confession is a tacit statement of an expectation of future indulgence, we should expect a licensing effect (Fitzsimons, Nunes and Williams 2007). Despite what the literature on public commitment suggests, the little evidence we have regarding the behavioral consequences of confession would seem to indicate that confession is somewhat licensing. A study involving individuals entering or exiting a religious confession found that individuals donated more to charity when approached for a donation prior to their confession than when approached afterwards, though results were somewhat mixed (Harris et al. 1975). Recent work in marketing has also found some evidence that for persons more likely to view confession as sufficient penance, such as consumers with backgrounds in Catholicism, confession can be licensing (Mathras 2014).

Confession may, in some instances, be viewed by the confessor as sufficient "good" behavior in and of itself. If the act of confession is perceived as a form of goal progress itself, or even if confessing evokes plans to make goal progress, then such perceptions could lead to moral licensing effects (Finkelstein 2010; Fishbach 2005). As compensatory behavior is more likely to apply in short-term contexts, confession

becomes a moral act that is even more recent than the transgression (Wilcox et al 2006), which would also predict licensing behaviors following a confession (Conway 2012). As confession helps us better understand the events underlying the confession, confessing something minor could lead confessors to reinterpret their violation as rather benign, which could lead to the ordeal being considered humorous, rather than a serious misdeed (McGraw and Warren 2010).

Work regarding the purchasing of embarrassing products shows that consumers feel less and less embarrassment the more experience they have purchasing an embarrassing product (Manchanda et al 2001). Thus, if confession can serve to similarly cauterize a confessor's sensitivity to whatever social judgment their action may incur, we would again predict confession to result in an increase in the confessed behavior.

In addition, all of the previously referred to benefits of confession may also support an argument for licensing effects. If a confessor feels less guilty, more relaxed, and more secure in their social relationships, they may feel more liberated to pursue indulgent opportunities (Baumeister 1994).

The Moderating Effect of Guilt, and Mediating Effect of Self-Views

It is possible that confession, in effect, serves to remove any kind of "fence-sitting" option that might exist, causing consumers to either choose to be comfortable with the indulgence or to remove it entirely (Nowlis, Khan and Dhar 2002). Confession, essentially, may act as a commitment in *either* direction – indulgence or restraint. As self-control failures are somewhat emotionally ambivalent, involving both positive and negative dimensions (Presser and Schumann 1980), and as confession permits confessors better understanding of the event (Kelly 1996), it is possible that confession shifts attitudes about the indulgent behavior towards less ambivalent positions, viewing the act with greater acceptance or greater distain (Nowlis, Khan and Dhar 2002). As such, confession could result in either licensing or reinforcement, depending, perhaps, on pre-confession attitudes towards the indulgent behavior.

While there are reasons to predict both licensing and reinforcing effects of confession, we propose that the ultimate effect of confession on behavior following a self-control failure will be moderated by the feelings of guilt associated with the transgression being confessed. Specifically, when major or high-guilt transgressions are involved, confession will reinforce goal commitment, but when minor or low-guilt transgressions are involved, confession will have licensing effects.

In the context of prosocial behavior, Gneezy et al (2012) find that the costliness of a prosocial behavior moderates whether the prosocial act is licensing or reinforcing, such that "costly" or difficult prosocial actions are reinforcing while relatively "costless"

prosocial behaviors create licensing effects. Similarly, Lowe and Haws (2014) find that the severity of the consequences of a shared self-control decision moderates the impact that the decision has on social relationships, such that dyads bonded over low-severity indulgences or from abstaining jointly from high-severity indulgences. If these contexts are sufficiently analogous to the case of self-control failures and confession, we should expect confessing a guilt-laden self-control failure to feel very costly, and therefore heighten commitment, while a less-guilty confession would be somewhat costless and therefore lead to licensing.

In the case of confession, feelings of guilt regarding the act make sense as a moderator. Confessing something that one feels rather guilty about is likely to be more difficult, painful, or embarrassing, relatively speaking, than confessing something involving only minor feelings of guilt. Furthermore, confession may influence the self-views of a confessor. A confessor may have an easier time separating the "sin" from the "self", and view one's self as a good person who did something bad, rather than a bad person. As such, we might expect confession to lead to higher commitment to the goal, as people tend to act consistently with their self-views (Charness et al. 2007; Chen and Li 2009).

As such, a high-guilt confession is more likely to have an effect on the confessor's self-views. If a confession helps a confessor to view themselves as a good or moral person who made a mistake, rather than just a weak or bad person, then confession should lead to commitment (Gneezy et al. 2012). However, we should only expect confession to impact self-views when rather costly, thus, low-guilt confessions should

display classic licensing effects. When moral behaviors are construed as more concrete, consumers are motivated to be consistent, whereas abstract construals of moral behavior can produce licensing effects (Conway and Peetz 2012). A highly painful confession might be more easily interpreted as moral behavior, relative to a somewhat painless confession. In short, self-views should mediate the confession-to-behavior process, as moderated by feelings of guilt about the deed being confessed.

In a series of 4 studies, we examine the prediction that guilt moderates the effect of confession on downstream behavior. In studies 1-3 we test the primary prediction in different ways and in different domains. Study 1 uses a hypothetical scenario involving dishonest behavior, while study 2 uses real confessions and finances as a context. Using health-related decisions as a context, study 3 examines the effects of real confessions on real behavior over a longer period of time. Finally, study 4 provides process evidence by examining the role of self-views in a real behavior study. After presenting the studies, we discuss the implications and future directions for this research.

Study 1

The purpose of study 1 was to test the prediction that the severity of the deed being confessed moderates the effect of confession on subsequent goal-directed behavior, such that large, guilt-laden confessions reinforce future goal-directed behavior while minor confessions create licensing effects. To first examine this effect in a highly controlled manner, a hypothetical situation is used to measure anticipated responses.

Method

Pretest. A pretest presented to 80 undergraduate students presented one of the two scenarios used in this study (described below in study procedure). A t-test established that the manipulation resulted in significantly different feelings of guilt about ceding to the temptation (M_{Major}=6.50, M_{Minor}=5.04, p<.001). Thus, these two scenarios were used in the main study.

Study Procedure. Participants were 87 undergraduate students who participated in a lab session in exchange for course credit. Participants were randomly assigned to imagine themselves in one of two hypothetical scenarios. Both scenarios involve being entrusted with the company credit card and sent on a shopping trip to an office supply store to pick up a large amount of supplies for an employer. Participants were told that these sorts of trips were routine, that essentially no one at work ever checked the itemized receipts for these purchases, and that getting away with extra purchases would be rather simple. In each scenario, the participants imagine coming across a personally desired item and feeling tempted to put it on the company credit card. In the "major" condition, this item is a pair of headphones valued at $100. In the "minor" condition, this item is a piece of candy costing $0.75. Very disparate pricing is used to ensure a high level of distinctiveness, and therefore guilt, between conditions. In both conditions, participants imagine ceding to temptation, purchasing the item with the company card, and never being caught (see Appendix for verbatim stimuli).

After reading the scenario, participants were randomly assigned to either a "confess" condition or a control condition. In the "confess" condition, participants were asked to imagine confessing what they had done to a roommate and were given time and a space to actually write out what they would say. In the control condition, participants were asked to "shift gears for a moment" and write about a favorite hobby or activity. After 1 minute, the page on which participants were writing automatically advanced and the dependent variables were presented.

Participants were asked "On your future office supply shopping trips, what are the odds that you might do something similar sometime?" and responded using a 7-point scale anchored on "Very unlikely" and "Very likely". A 13-item measure of trait self-control was taken (Tangney 2004) and the study concluded.

Results

A total of 5 participants did not complete enough of the study to have usable data, resulting in a final sample size of 82. We tested for the predicted interaction between infraction severity and the presence or absence of confession. An ANOVA using infraction severity (major vs. minor) and confession (confess vs. control) conditions was used to predict anticipated future behavior. Surprisingly, there were no significant main effects for severity condition (M_{Major}= 2.62, M_{Minor}= 2.52, F(1, 81)=.056, NS) or confession condition ($M_{Confess}$= 2.31, $M_{Control}$= 2.83, F(1, 81)=1.616, NS). However, there was a significant interaction between conditions (F(1, 81)=4.84,

$p<.05$) such that confessing the major indiscretion decreased the likelihood of repeating the dishonest act in the future ($M_{Confess}=1.91$, $M_{Control}=3.33$), whereas confessing the more minor indiscretion actually *increased* the likelihood that participants would do the same thing again ($M_{Confess}=2.73$, $M_{Control}=2.33$).

Discussion

In study 1, confessing a high-guilt "sin" appeared to heighten commitment to avoid repetition. Whereas confessing a more minor "sin" had the opposite effect, that is, it seemed to have a licensing effect wherein participants anticipated being more likely to repeat the offense again. This basic result supports our primary prediction.

Study 2a

The purpose of study 2 was to again test our primary prediction that severity moderates the effect of confession on subsequent goal-directed behavior, such that large confessions reinforce future goal-directed behavior while minor confessions create licensing effects. However, whereas study 1 examined a hypothetical scenario, study 2 uses recollections and confessions of real behavior. Study 2 also employs a unique domain – spending - to show the robustness of the effect. In addition, while study 1 used a manipulation to influence feelings of guilt through a more or less severe act, study 2 uses real feelings of guilt about the recalled behavior.

Method

An online panel of 83 individuals were recruited and paid to participate in the study. To begin, participants were asked to recall a time that they spent money in a somewhat wasteful manner. To ensure some level of consistency across participants, they were asked to recall an indulgent occasion involving unnecessarily spending a dollar amount of approximately 40-50 dollars. This range was chosen because we surmised that there would be sufficient variation in terms of how severe wasting $40-$50 would be, and therefore how much guilt this would induce. After being given some time to recall a specific event, participants were asked to rate how guilty they felt about this occasion using a 7-point scale anchored on “not guilty at all” and “very guilty”.

Next, participants were randomly assigned to either the confession or control condition. In the confession condition, participants were told that they would be writing a confession about the details of the event they had recalled previously, while in the control condition participants were told that they would be writing about their favorite music for a few minutes. Before writing anything, participants in both conditions were first asked to provide the name of and their relationship to an individual that would ostensibly be emailed their written responses. This served to heighten the reality and the perceived consequences of the confession.

In the control condition, participants were asked to write about their favorite music for at least 1 minute. In the confession condition, participants were asked to write about the details of the occasion of financial indiscretion that they recalled at the

beginning of the study for the same amount of time. The “submit” button was hidden for 65 seconds to ensure that participants took adequate time to complete this section. The total time spent on the writing screen was recorded, as was the length of the text written by the participants.

When they had finished writing, participants were asked to imagine coming across a tempting but unnecessary item later that day. To ensure participants had a clear image of the item, and that the product would be enticing to them personally, each participant was asked to imagine something costing around $40-$50 dollars and to list the product they had in mind. After listing the item, participants were asked how likely they would be to splurge and purchase that item using a 7-point scale anchored on “very unlikely” and “very likely.” To conclude, participants provided demographic data including age, gender and income.

Results

There were no significant differences between conditions regarding guilt, amount spent on the event recalled, time spent recalling the event, closeness to the recipient or demographics including gender, age, income, or ethnicity. The measure of guilt was crossed with confession / control conditions in a linear regression predicting each participant’s likelihood of splurging again on the item they imagined. The regression uncovered two significant results. First, there was a significant main effect of confession, such that confessing the previous mistake significantly decreased participant’s likelihood

of splurging on another tempting item (β=-2.78, t=-2.105, p<.05). The main effect of guilt was also significant and negative (β=-.399, t=-2.09, p<.05), indicating that recalling feelings of greater guilt also discouraged future indulgence. Finally, the interaction between guilt and confession was significant (β= .808, t= 2.87, p<.01) again demonstrating that, relative to the control condition, confessing incidents of major guilt was reinforcing. While the pattern of results suggests that low-guilt confessions may be licensing, the Johnson-Neyman region of significance in this study occurred only when guilt was greater than 4.36. The absence of a significant region of licensing effects may be due to a relatively higher level of overall guilt in this study (mean guilt = 4.55).

One possible alternative explanation for the significant results from the regression is that participants in the confession condition have simply spent more time thinking about their spending mistake. However, the model is robust (and virtually unchanged) when including time spent during recall and time spent writing. In addition, a variable summing time spent recalling and time spent writing for those in the confession condition, compared to just time spent recalling the mistake for those in the control condition, also made virtually no difference to the results when included in the model. Thus, the observed effects of confession are very likely to be driven by more than simply an increase in time spent recalling the mistake.

Discussion

Study 2 provides additional support for the moderating effect of guilt on confession, such that confessing high-guilt events is reinforcing, while confessing low-guilt misdeeds can be licensing. Study 2 also shows this result using recollections and confessions of real behavior and real feelings of guilt, measured continuously. We also find that these effects occur very shortly after confession, as behavioral intentions were affected almost immediately following confession. However, studies 1 and 2 have only measured behavioral intentions, thus, study 3 attempts to observe these effects over time in real behavior.

Study 2b

The purpose of study 2b was to replicate the findings of study 2a in a unique domain. Study 2b uses health and diet as a domain to again examine the primary prediction that guilt moderates the effect of confession on subsequent self-control decisions.

Method

One hundred and thirty-four students participated in the study in exchange for course credit. As in study 2a, participants were each asked to take a moment and recall some recent self-control failure. However, in this study participants were asked to recall recent "physically unhealthy behavior" regarding diet or exercise. After each individual spent time recalling at least one count of unhealthy behavior, participants rated how guilty they felt about the behavior using a 7-point scale anchored on "not guilty at all" and "very guilty".

Participants were then randomly assigned to either a control or confess condition. In the control condition participants were asked to change topics and write about their musical preferences for as long as they wished, while in the confess condition participants were asked to write a confession about the behavior they had recalled. Each participant's time spent writing was recorded.

After either confessing or writing about an unrelated topic, participants were asked to think about what they would like to have for a snack at the moment, and were asked to indicate their preference between an unhealthy snack (M&M's) and a relatively healthier snack (raisins) using a 7-point scale anchored on "definitely M&M's" and "definitely raisins". This concluded the study.

Results

Again there were no significant differences between groups in terms of guilt, gender, or time spent recalling the misdeed. There was a significant difference in time spent writing, which will be addressed in the analysis.

A regression revealed a significant interaction between confession and guilt when predicting (healthy) snack preference (β=.671, t=2.68, p<.01). Significant contrasts were found (using Johnson-Neyman technique) regions of significance occur when guilt was less than .281 and when guilt was greater than 5.98, again supporting the primary prediction that confessions can be either licensing or reinforcing, depending on the a-priori guilt felt regarding the confessed act.

Again these results were robust to the inclusion of a number of covariates including time spent recalling, time spent writing, total time spent thinking about the mistake (as in study 2a), and gender.

Study 3

The purpose of study 3 was to see if confession can affect real decisions, and not merely behavioral intentions (as in studies 1 and 2a) or preferences (study 2b). In addition, study 3 uses filler studies to create a time gap between the confession and the behavioral decision.

Method

Participants were 249 undergraduate students participating in a lab session in exchange for course credit. As in study 2b, study 3 began with all participants being asked to recall recent self-control failures regarding their diet or some physically unhealthy behavior. After taking a moment to recall specific behavior, participants were again assigned at random to a control condition or a confession condition. In the control condition participants again wrote about their musical preferences, while in the confession condition participants penned confessions regarding their behavior. Again, time spent on each step was recorded, as participants were permitted to write for as much time as they desired before submitting their responses. After either confessing or writing in the control condition, participants were thanked and the study ostensibly concluded.

For the next 10 minutes (approximately), participants worked on other, unrelated lab studies, believing that the study regarding their self-control failure had concluded.

After working on other unrelated studies for a period of time, each participant was linked to a new screen indicating the beginning of a new study. Participants were told that for this study they would be consuming a real snack food that would be provided to them by lab administrators based on their preference. Participants was told that they needed to indicate their preference between two snacks using a 7-point scale. The two snacks available were apple slices and M&M's, representing a healthy and an unhealthy snack option, respectively. After each participant indicated their preference, they were thanked and the study concluded (sadly, without any real snacks).

Results

There were no significant differences between conditions regarding guilt, time spent recalling behavior, or gender.

A regression again revealed a similar pattern to previous studies when predicting indicated preference for the unhealthy snack. The interaction between confession and guilt was significant (β=-.304, t=-1.99, p<.05), such that low-guilt confessions led to greater indicated preference for M&M's, while high guilt confessions led to lower indicated preference for M&M's. Whereas study 2a only displayed significant (reinforcing) contrasts for high-guilt confessions, and study 2b displayed both reinforcing and licensing effects, the Johnson-Neyman region of significance for study 3 only reveals significant contrasts for licensing effects, when guilt was less than 2.02.

This is possibly due to study 3 involving lower overall levels of guilt across the sample (mean guilt = 3.87) relative to previous studies.

Study 3 again shows that a-priori guilt regarding a confessed act moderates the effect of confession on subsequent self-control decisions. Study 3 uses actual behavioral intentions and shows these effects hold over at least a short time window after the confession.

Study 4

The purpose of study 4 was again to test the primary hypothesis that the effect of confession on future self-control related behavior is mediated by feelings of guilt over the confessed indiscretion. However, whereas studies 1 and 2 examine behavioral intentions, and study 3 examines choice over a short time period, study 4 examines real behavior over an extended time period following a confession.

Method

Participants were 199 undergraduate students participating in a 2-part study in exchange for course credit. The first part of the study took place in a behavioral laboratory on a large southern college campus. Participants were seated at individual computer stations with privacy partitions. To begin the study, all participants were asked to take a moment and recall some of their recent unhealthy behavior. After recalling

some specific instances, participants were asked how guilty they felt about the behavior they had recalled and responded using a 7-point scale anchored on “not guilty at all” and “extremely guilty.” After indicating their guilt, participants were randomly sorted into confession vs. control conditions. In the confession condition, participants were asked to write out the details of their unhealthy behavior, and were told that they should consider it an opportunity to “come clean.” In the control condition, participants were asked to “change topics for a minute” and write about some of their current musical preferences. After participants were given time to write, each provided information including gender, height, weight, and health goals. None of these covariates significantly impacted the outcome of the study, and will not be discussed further. This concluded the first part of the study.

Exactly two weeks (14 days) later, participants returned to the behavioral laboratory for the second part of the study. After completing several unrelated tasks, and without reminder of any of the previous lab session, participants were asked to think about their health-related behavior over the previous 2 weeks and to rate their own health-related behavior on a 7-point scale anchored on “extremely unhealthy” and “extremely healthy.” After this, participants were reminded of the exercise in the previous lab session in which they recalled unhealthy behaviors, and each was asked if they remembered what behavior they thought about during that exercise, again responding using a 7-point scale anchored on “definitely no” and “definitely yes.” This concluded the study.

Results

Out of 199 original participants, 176 completed both parts of the study. First, there was no virtually no difference in the feelings of guilt between the confession ($M_{Confess}$=4.30) and control conditions ($M_{Control}$=4.34; $F(1,197)$=.024, *NS*). There was also no difference in the length of the text, in number of characters, written between conditions ($M_{Confess}$=422, $M_{Control}$=439; $F(1, 197)$=.242, *NS*).

Next a linear regression was used to understand how the effect of confession on downstream behavior was moderated by the guilt incurred from the initial self-control failure. There was a significant interaction between guilt and confession when predicting health-related behaviors, such that confessing high-guilt indiscretions led to better health-related behavior relative to the control condition, whereas confessing low-guilt indiscretions undermined future health-related behavior relative to the control condition (β=.650, t=3.16, p<.01). There was also a significant main effect of confessing (β=-.508, t=-2.66, p<.01) and a marginal main effect of guilt (β=-.178, t=-1.67, p<.10).

Similar to study 2b, study 4 shows both significant licensing and reinforcing effects, as Johnson-Neyman regions appeared both at the low end of the guilt-spectrum (guilt<.2.23) and when guilt was high (guilt>5.25).

Discussion

Overall, these results again provide more support for the primary hypothesis, that high-guilt confessions can reinforce future self-control related behavior, while low-guilt confessions can actually have a licensing effect. Finally, study 4 again shows that actual behavior, not just behavioral intentions, can be affected and can be altered, in this study over an extended period of time.

General Discussion

In 4 studies this work demonstrates the effects of confession on subsequent goal-directed behavior. Specifically, we show that confession has licensing effects for those with relatively low amounts of guilt regarding the confessed event, while confession is reinforcing for those experiencing higher amounts of guilt related to the event. We demonstrate that these effects hold in real-behavior settings, and that the effects can persist over time.

Contributions and Implications

This research, particularly the moderating effect of guilt, helps to clarify apparently conflicting results from previous research showing that confession can be

either reinforcing (Mathras 2015) or licensing (Harris et al. 1975). We also add one of the first works regarding confession of self-control failure, while adding to literature on self-control and social influence, generally.

There are several implications this work carries for consumers, marketers, and public policy makers. First, goal-oriented support groups such as addiction recovery groups or weight loss support groups should understand that while public discussion of our mistakes can in some instances aid in our future adherence to these goals, it also has the potential to backfire if there is a lack of genuine guilt regarding our transgression.

Marketers may wish to encourage disclosure or discussion if the products they market are typically associated with minor levels of guilt. Such confession should lead consumers to feel more comfortable consuming more of that product on future occasions.

Future Research and Conclusions

There are a large number of moving parts in any real confession. First, there are likely to be differences that occur depending on the audience size (Barasch and Berger 2014). How might these effects differ when confessing to a single individual rather than a large group of listeners?

Furthermore, in the current set of studies, we do not account for the reactions of those listening to the confession. Public confessions, if seen as sincere, are likely to be met with forgiveness (Weiner et al. 1991). If reactions are positive or even minimize the

mistake, this may have a very different effect on future behavior relative to reactions where the mistake is condemned, shamed, or met with anger. It is conceivable that even a high-guilt confession, if met with a very positive response, might lead to licensing effects based solely on the social reaction.

Similarly, another future research direction could examine differences in the effects of confession depending on how close the confessor feels to the listener (Cozby 1973; Naylor et al. 2011). Confessing to a best friend may do more than confessing to a stranger (Latane 1981). Confession also occasionally involves acts that in some way directly impact or even harm the listener. For example, confessing an extracurricular romantic encounter to a friend is rather different than confessing that same encounter to one's spouse or relationship partner. If the listener has been personally impacted by the indiscretion, the effects of confession may vary significantly.

Finally, confession may occur either in person or mediated by some electronic device. Social media is now a popular venue for confessions, and some of confession websites even allow anonymous confessions. However, digitally mediated social interactions lead to some ambiguity regarding the audience (Naylor et al. 2011), which may alter the interaction. How do the results of confession change dependent on the medium of confession?

Confession is a natural and commonplace human behavior, and is a part of everyday life in large and small ways. Such a pervasive behavior is still little understood. This work aids our understanding of the role of confession in our lives as it affects our decisions and behavior after the fact. While there is still much to be understood

regarding the phenomenon, we now hopefully have a better grasp on the true power and potential of getting something off your chest.

CONCLUSIONS

A number of major societal issues today stem from individual-level struggles with self-control. Consumers carry high levels of financial debt, health issues have arisen from poor individual decisions regarding diet and exercise, and drug and alcohol abuse wreak havoc on individuals, families, and even communities. Poor self-control leads not only to momentary guilt, but to significantly worse wellbeing across the course of a lifetime. Because many of these issues spring from patterns of decisions that ultimately lie in the hands of an individual, much self-control research has focused on the interplay between an isolated individual and the tempting decision at hand. However, is it not possible that societal forces more dramatically shape our choices between virtue and vice? Indeed, self-control may exist in human beings at all as a means to serve the ultimate, underlying purpose of helping us to be good members of a group. Still, despite the powerful influence individuals exert on one another, relatively little has been researched regarding ways that social influence impacts self-control.

In the two essays that form this dissertation, I examine interpersonal influence in the context of self-control decisions. In this regard, this dissertation contributes to both the self-regulatory literature as well as research from psychology and marketing regarding social influence. Specifically, these essays demonstrate ways that the involvement of other individuals in self-control decisions and struggles can affect the decisions we make (for better or for worse) as well as the guilt that we feel as a result. Furthermore, just as there are social inputs to self-control decision, this work also

demonstrates some social outputs, as self-control decisions involving other individuals can affect interpersonal feelings of social affiliation. This, too, bears some significance as positive social relationships are essential to human wellbeing.

Essay one looks how another individual may impact a self-control decision by virtue of involvement with the same decision. In this manner, essay one responds to the call for more research involving dyadic decision making. However, essay one contributes a novel perspective on dyads or groups making decisions together. This essay explores situations which we call "parallel" self-control decisions, in which multiple actors face the same self-control dilemma, yet are free to make their own decision regarding whether to indulge or abstain. Essay one contributes a new dyadic framework for examining these decisions, and tests the framework in a series of studies spanning the domains of money, time management, and food consumption. I find that consumers demonstrated a tendency to bond over matched self-control decisions through "coindulgence" or "coabstinence" as compared to "defiant indulgence" or "defiant abstinence."

However, the perceived severity of choosing vice over virtue influenced when each of the matched outcomes produced greater affiliation, a result that helps clarify previous findings supporting both self-control and indulgence as socially superior. When indulgence threatened to seriously hinder goal progress, consumers bonded through moral support evidenced by joint abstention or "coabstinence." When the consequences were perceived as relatively less severe, consumers found friendship through partnering in crime by both indulging, or "coindulgence." Throughout, guilt underlies the

relationship between self-control behaviors and social outcomes, as peer compliance reduces guilt and thus improves affiliation. Essay one also demonstrates that even when free to act individually, participants had a strong tendency to match one another's self-control related decisions, and outcome consistent with prior literature.

Essay two examines another natural intersection of self-control and social influence by exploring the role of confession in the domain of self-control failure. While confession is a very common practice and has been throughout history, very little is known about how confession actually impacts future behavior. Essay two demonstrates that confessing self-control failures can be either licensing or reinforcing to future behavior and that, similar to essay 1, the effect is moderated by subjective evaluations of severity on the part of the confessor. Specifically, confessing events about which the confessor feels a high amount of guilt reinforces future goal-consistent or repentant behavior, while confessing self-control failures about which the confessor feels only a minor amount of guilt proves to have a licensing effect for future goal-relevant decisions. This effect is demonstrated in the domains of spending and eating. Furthermore, essay two demonstrates that the effects can have short term as well as more enduring effects. In this manner essay 2 adds to work demonstrating a somewhat similar effect demonstrated in the context of pro-social behavior. Essay 2 also resolves somewhat conflicting results observed in what research regarding confession exists by showing that confession can have both a licensing and a reinforcing effect, depending on the guilt regarding the confessed event. Most importantly, essay 2 contributes to our

general understanding of the role that confession plays in human lives and interactions, as very little has been researched on the topic.

Overall, this dissertation has not only theoretical implications for the literature in both marketing and psychology in the areas of self-control, social influence and social identity, but has both managerial and public policy implications as well. For example, marketers of relatively minor vices might encourage joint consumption of their products, or at least make visible the fact that consumers of such items are in good company. Indeed, messages regarding the affiliation felt between such consumers could be effective. In addition, confession of such minor vices would also seem to boost consumption. However, for more serious self-control failures, confession could be encouraged by public policy makers or by support groups as a means of boosting future self-control in these domains. Similarly, such groups might also avail themselves of the promise of social bonding that takes place between individuals mutually abstaining from tempting but harmful substances or practices.

To theory, this work contributes a new framework, new constructs, and new results that expand our understanding of self-control decision making and the role of others in those decision, and resolves potential conflicts in previous research (Harris et al. 1975, Mathras 2014).

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APPENDIX

Essay 1

Pilot study stimuli:

All participants read the following introduction:

> *"Imagine that you have to pick your college roommates based on their responses to various questions. You won't know anything about them besides their responses. On the following screens you will see different variations of questions that your potential roommates could answer for you. Your job is simply to indicate which of the questions you think is a better question for determining whether or not you're going to like someone."*

Set 1:

> ***"Question A**: What would you be more likely to order at a restaurant - a steak dinner or a grilled chicken salad?*
>
> *Or*
>
> ***Question B**: What would you be more likely to order at a restaurant - a steak dinner or chicken Alfredo pasta?"*

Set 2:

> ***"Question A**: What are you more likely to do with an empty plastic bottle in your backpack, throw it away in the nearest trash can, or throw it*

away when you get home?

Or

***Question B**: What are you more likely to do with an empty plastic bottle in your backpack, throw it away in the nearest trash can, or wait a little until you find a recycling bin?*

Set 3:

***"Question A**: If you won a $100 cash prize, what would you be more likely to do - spend it on something fun or save it?*

Or

***Question B**: If you won a $100 cash prize, what would you be more likely to do - spend it on school expenses or save it?"*

Study 1b Stimuli:

Low severity (healthy) condition:

"Imagine that you and a friend have just completed a free health screening. You have both been eating really healthy and exercising regularly, especially over the last few months. At the end of the screening you are pleased to discover that you are both in extremely good health. The physician who went over the screening

with you commended you and your friend and encouraged you to keep up the good work."

High severity (unhealthy) condition:

"Imagine that you and a friend have just completed a free health screening. You have both been really busy and have not been taking very good care of your health, especially over the last few months. You are shocked to discover that you both have dangerously high levels of cholesterol. The physician who went over the screening with you very seriously urged you and your friend to be careful about what you eat and to try to get some exercise, as you are at serious risk of long-term health problems."

Study 2 Stimuli:

Low severity condition:

"You and a roommate have an early class together. You both have been working hard to get a good grade in the course and you have both been very good about attending all semester, even though attendance is not required. On this particular morning you and your roommate are really dragging, the topic of today's class is especially boring, and the weather outside is crummy. (One of you) suggests that instead of going to class today you guys should sleep in and then go out to get something for breakfast together a little later.

High severity condition:

“You and a roommate have an early class together. You both have been working hard to get a good grade in the course and you have both been very good about attending all semester, as attendance is required. On this particular morning you and your roommate are really dragging, but the topic of today’s class is especially important, and there is an online quiz on the topic later this evening.(One of you) suggests that instead of going to class today you guys should sleep in and then go out to get something for breakfast together a little later.”

Co-Indulgence:

“You love the idea and you both go back to bed dreaming of breakfast after a few more hours of sleep.”

Co-Abstinence:

“Ultimately, however, you and your roommate decide it's best to tough it out and go to class.”

Defiant Indulgence:

“However, your roommate decides to tough it out and go to class leaving you to stay home alone for a few more hours of sleep.”

Defiant Abstinence:

"However, you decide to tough it out and go to class, leaving your roommate to stay home alone for a few more hours of sleep."

Essay 2

Study 1 Scenario – High Guilt

"*Your boss at work has asked you to head to Best Buy to pick up a large number of supplies that the office needs. Your boss trusts you with the company credit card and you head out to make the purchases.*

After gathering everything on the list, you are getting ready to check out when you see a really nice pair of headphones (delicious piece of candy). You have really, really been wanting a new pair and these are on sale for just under $100. The stuff you're buying for the office will already total a few thousand dollars, and you know that no one ever checks these large purchases out item by item. Basically, you know for sure that it would go totally unnoticed if you were to just add these headphones onto the purchase."

Study 1 Scenario – Low Guilt

“*Your boss at work has asked you to head to Best Buy to pick up a large number of supplies that the office needs. Your boss trusts you with the company credit card and you head out to make the purchases.*

After gathering everything on the list, you are getting ready to check out when you see the candy at the register. You are feeling really hungry and they have your favorite kind of candy for just 75 cents. The stuff you're buying for the office will already total a few thousand dollars, and you know that no one ever checks these large purchases out item by item. Basically, you know for sure that it would go totally unnoticed if you were to just add a piece of candy onto the purchase.”