

Self-Regulation in the Interpersonal Sphere

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Self-control almost assuredly developed in the interpersonal sphere before the intrapersonal sphere. Starting from toilet training to the decision to diet, societal expectations are the distal pressures that prompt people to control their behaviors. The need to belong (Baumeister & Leary, 1995) was a strong force shaping humanity, and therefore adhering to relational norms was crucial to being included and staying included.

Research and theory on self-control in the field of psychology has taken a different tack, one emphasizing the personal sphere rather than the social sphere. With early work on self-awareness and self-standards (Duval & Wicklund, 1971), to theories on self-guides (Higgins, 1987) and emotional states as signals of goal progress (Carver & Scheier, 1990), to work on the motivation to be autonomous (Deci & Ryan, 1995), to the recent surge of interest on nonconscious goal progress (e.g., Bargh, 1994; Dijksterhuis & Nordgren, 2006), the field of psychology has focused mainly on the inner self's role in self-regulation. And with good reason: It makes sense to study the self-as-agent through its actions, reactions, emotions, and decisions. Nonetheless, it is instructive to consider the underlying motive for engaging the executive function – a function that exacts considerable costs. That motive almost certainly entails the desire to be socially acceptable (Heatherton & Vohs, 1998; Vohs & Schmeichel, 2007).

Baumeister's (1998) treatise on the self outlined three major features of selfhood: one involving reflexive self-awareness, the second interpersonal relations, and the third the executive function – for which self-regulation is paramount. This chapter focuses on the influence of self-regulation on interpersonal relations; that is, the interface between two roots of the self. We test self-regulation using a limited resource model, which depicts the engagement of the executive function as being

temporarily taxing. We have used this model to understand which interpersonal roles and reactions are particularly challenging in order to make claims about which social behaviors require people to exert control over themselves and, by extension, which require less conscious control. The findings, then, can perhaps give hints as to humans' underlying predispositions and which circumstances are important enough to elicit motivation to overcome them.

The Limited-Resource Model of Self-Control

Similar to the functioning of a muscle, the limited resource model of self-regulation (Baumeister, Bratslavsky, Muraven & Tice, 1998; Baumeister & Vohs, 2003) posits that any form of self-control behavior that involves deliberate, conscious and controlled responses by the self draws on a limited resource, akin to strength or energy (see Baumeister, this volume). In addition, the model holds that one act of active volition will have a detrimental impact on any subsequent act that draws from the same resource. This resource can be replenished but at a slower rate than it is consumed. As a consequence, and similar to muscle failure after repeated straining, a series of self-regulatory acts will deplete the available resource to the point of self-regulatory failure (Baumeister, Schmeichel, & Vohs, 2007). In this state, the self is less able to function effectively, which results in reliance on habit, routine, and automatic processes (Baumeister, Muraven, & Tice, 2000, Vohs, Baumeister & Ciarocco, 2005).

Recent research (Gaillot & Baumeister, 2007; Gaillot, Baumeister & DeWall, 2007) points to the suggestion that not only prototypical instances of the exertion of self-control drain this resource, such as when one resists strong urges or breaks engrained habits, but also a variety of other executive functions, including controlled attention, the generation and regulation of thought and feelings, complex mental

operations such as syllogistic and reflective reasoning, and the performance of complex and novel motor actions. Moreover research suggests that the metaphor of willpower should be taken seriously insofar as blood-glucose levels appear to be a central component of this resource and that self-control failure is most likely during situations where blood-glucose levels are low or used ineffectively (Gailliot & Baumeister, 2007).

Research using the self-regulatory resource model typically uses a paradigm involving (at least) two resource-consuming tasks. In the first phase, participants are either requested to perform a task that is thought to consume self-regulatory resources, or they perform a less taxing version of the experimental task. The type of task participants are requested to complete constitutes the key independent variable. Next, performance on a second and often unrelated resource-consuming task is measured, which serves as the dependent measure. A state of self-regulatory resource depletion is inferred if performance on the second task is impaired as a function of having completed the first demanding task. The rationale behind this procedure is that completion of the first task requires the consumption of large quantities of the self-regulatory resource. This reduced supply of regulatory resources consequently reduces the person's capabilities to successfully regulate behavior during an ensuing period in which the second task is presented, a situation that has been likened to a "hangover-effect" (Vohs, 2006). A large body of research spanning various domains and including over 75 published studies has successfully used this paradigm and results support the basic tenets of the limited resource model of self-control. Much of this research has focused on intrapsychic phenomena that are affected by or will affect the resources available for self-control.

In a seminal study examining the notion of what they term “ego depletion,” Baumeister et al. (1998) showed that people who exerted conscious self-control on one activity subsequently performed poorer on a second unrelated task. For instances, in one experiment these authors showed that participants who were requested to eat unpalatable food (radishes) persisted less on a subsequent frustrating, unsolvable puzzle (figure-tracing) task than did participants requested to eat enjoyable food (chocolate-chip cookies) or no food. Presumably, having to overcome the resistance to eat the less-than-tasty radishes consumed self-control resources and the resulting depletion carried over to detrimentally impact participants’ stamina at the frustrating puzzle. In addition, Baumeister et al. (1998) asked participants to deliver a counter-attitudinal speech (supporting a tuition raise), either as an act of free choice or forced to do so (Experiment 2). The same puzzle task as just described was used as dependent measure to assess the extent of self-regulatory resource depletion. In support of predictions, it was found that freely complying with the request to deliver the counterattitudinal speech resulted in lower persistence and fewer attempts in solving the puzzle as compared to when subjects were forced to deliver the speech. Hence, actively and freely taking responsibility for delivering the speech used up the resource for self-control, resulting in impaired performance on subsequent self-regulatory behavior. Moreover, this research showed that resource depletion effects could also be brought about by actively suppressing emotions (Experiment 3), or performing a cognitively demanding task involving syllogistic reasoning (Experiment 4).

Resisting temptations or indulging oneself in the consumption of forbidden fruit constitutes an important operating theatre of self-regulation processes. In a series of studies, Vohs and Faber (2007) showed that regulatory resource depletion may affect

a specific type of indulgence: the urge for consumers to engage in impulsive spending. In their research, Vohs and Faber demonstrated that depleting consumers of their self-regulatory resources by attentional, mental, or emotional self-control tasks resulted in increases on several indexes of impulsivity in the marketplace.

Another temptation that sometimes requires active self-regulation to withstand is that presented by the lure of attractive and enjoyable (but often unhealthy and fattening) food. For people attempting to control their food intake, the availability and proximity of tempting food may exert a strong impact on their ability to curb the urge to eat. Heatherton and Vohs (2000) examined the impact of the temptation of tasty food on self-regulatory resources. In one study, the authors had dieters and non-dieters watch a (boring) movie about the daily life of bighorn sheep. In the room in which they watched the movie, snacks and candy were placed. Those snacks were either within close reach of the participant or across the room. In addition, participants were either instructed to refrain from eating the food, or were told they were free to do so. It was expected that being close to tempting food items that were free for the taking presented a formidable temptation that needed considerable amounts of regulatory resources to resist, especially for dieters. Because dieters are regulating with respect to an eating goal (i.e., they are controlling their behavior towards food) – but nondieters are not – dieters were expected to become more depleted than nondieters in the same condition. The results were in accordance with this prediction. After watching the sheep movie, both dieters and nondieters were asked to taste and rate ice cream. Dieters ate significantly more ice cream than nondieters when they had been seated next to the available snacks and candy. Furthermore, Heatherton and Vohs (2000) found that depletion effects for dieters were not only restricted to eating-related behaviors, but extended to nonfood-related

self-regulatory behaviors as well (persistence at solving impossible puzzles), thus corroborating the notion that once depleted, people will exhibit reduced performance at *any* subsequent act of self-control.

Another demonstration of this notion was provided by the work of Schmeichel, Vohs, and Baumeister (2003). Not only can quitting prematurely at a frustrating task, indulging oneself in excessive spending, or tasting forbidden fruits result from regulatory resource depletion but so can also impaired intellectual functioning (Schmeichel et al., 2003). This suggests that self-regulatory resources are also involved in logical reasoning and higher-order reflective processes (Strack & Deutsch, 2004, Vohs, 2006). In one of their studies, Schmeichel et al. (2003) requested participants to watch a video of a woman being interviewed. On the bottom portion of the screen appeared unrelated words that participants in the depletion condition were asked to actively ignore. Nondepletion participants also saw the irrelevant words but were not asked to ignore them. The results showed that depletion condition participants subsequently performed worse than nondepletion participants on logical reasoning problems from the Graduate Record Exam (GRE), and they attempted to solve fewer items. Hence, attentional control during the video task resulted in a decrement in complex cognitive functioning as measured by the GRE test.

Apart from these studies, the limited-resource model of self control has been supported by research on such domains as active decision making (Vohs et al., in press), cognitive response generation (Schmeichel, Demaree, Robinson, & Pu, 2006), persuasion (Wheeler, Briñol, & Hermann, 2007) and stereotype suppression (Richeson & Trawalter, 2005).

The Interplay Between Self-Control and Public Social Behaviors

The fact that a multitude of studies have found support for the notion of finite resources of self-control in the personal sphere does not mean that public, interpersonal functioning is left unaffected by it. On the contrary, as has been argued earlier, self-control is likely to be influential in the realm of interpersonal behavior. Interpersonal interactions can be inefficient and taxing, thereby involving active self-regulation, which can lead to later self-control failure (e.g., Finkel et al., 2006). The limited resource model has only just begun to be applied to interpersonal phenomena, but several issues have received scholarly attention: the role of self-regulation in impression formation in dyadic interactions and interpersonal social influence processes.

Impression Management Requires Self-Regulatory Resources

Successful impression management may be essential for affiliation and social acceptance. Active self-presentation, which means to attempt to project to others a specific image of the self has been shown to effortful endeavor requiring self-regulatory resources. Support for this contention was found in eight studies conducted by Vohs, Baumeister, and Ciarocco (2005), who found that depletion of self-regulatory resources negatively affected controlled self-presentation and, conversely, that effortful impression management may result in reduced self-regulatory resources.

In one of their studies, Vohs et al. (2005) examined the hypothesis that counter-normative modes of self-presentation can be quite resource-demanding, and thus deplete self-regulatory resources to a larger extent than normative modes of self-presentation. In particular, Vohs et al. (2005) relied on findings from Tice, Bratslavsky, and Muraven (1995 XXX) demonstrating that the normative style of self-presentation when with friends calls for modesty, whereas a more boastful style is

acceptable when one presents oneself to a stranger. Hence, in this study, some participants were asked to engage in a typical, normative self-presentation style (i.e., modest toward friends, self-enhancing toward strangers), whereas other participants were requested to adopt an atypical, counter-normative presentation style (i.e., boastful toward acquaintances and modest toward strangers). Afterwards, participants were asked to complete a mathematical task. In line with predictions, those participants who had to perform counter-normative, atypical self-presentation styles performed worse than participants who adopted normative, typical impression management styles.

In another study, the authors assessed the effects of impression management styles as a function of gender roles. It was hypothesized that although there is much overlap between men and women in terms of their self-presentations, conventional gender roles implicate men as having to highlight their personal accomplishments and women their interpersonal skills. Hence, Vohs et al. reasoned that going against the typical style would be costly, in the form of reduced self-regulatory resources and hence worse self-control. The results were in accordance with predictions. Both men and women were requested to squeeze a handgrip twice during the experiment, once before the self-presentational task and once afterwards. Men who were asked to present themselves by focusing on their outstanding interpersonal skills and women who presented themselves in terms of their outstanding personal accomplishments showed poorer performance on the handgrip task than participants presenting themselves in accordance with gender roles.

In addition, Vohs et al. (2005) also assessed self-regulatory ability by means measuring the extent to which participants were able to control their facial expressions during an emotionally-laden video. In this study, the crucial self-

presentational task was not counter-normative but instead highly challenging (Schlenker, Weigold, & Hallam, 1990). Participants in the crucial condition attempted to present themselves as both likable and competent in front of an ostensibly skeptical audience subsequently showed more leakage (Ekman, 1992) of facial expressiveness than did participants who presented themselves naturally or as likable and competent toward an accepting audience. In addition to demonstrating that effortful self-presentation can affect self-regulatory resources, Vohs et al. (2005) also demonstrated the converse pattern – that is, that depleted self-regulatory resources negatively affect effective impression management. In one of study, Vohs et al. (2005) manipulated thought control by instructing some participants to suppress thoughts of a white bear (see Wegner, Carter, Schneider & White, 1987) whereas others were free to think what they wanted (including a white bear), with the effortful thought suppression condition designed to consume self-regulatory resources. Participants who engaged in the thought-control task became more blurtative, which means that they felt the need to speak whatever came to their minds. Prior work has shown this to be an ineffective tactic for making a good impression (Swann & Rentfrow, 2001). Moreover, in a separate study, self-regulatory resource depletion was found to result in inappropriate self-disclosures toward a stranger, especially for participants characterized as having an insecure attachment style.

Other research supports the notion that not just impression management, but also impression formation processes may leave people prone to self-regulatory failure. A study by Nordstrom, Hall, and Bartels (1998) revealed that in a simulated job interview setting, participants who played the role of interviewer were involved in more active self-regulation, whereas the other half of participants only observed the interaction and hence were less engaged in controlled self-regulation. For the

interviewers, impression formation suffered as a function of the burden of active self-regulation that was involved in conducting the interview. Interviewers proved less able than observers to correct their initial judgments of the job applicant after receiving additional information. Hence, it is not just actively conveying information about oneself that requires self-regulation, but actively processing such information as well.

This result is consistent with research by Gilbert, Pelham, and Krull (1988) suggesting that a three-phase process governs the person perception process consisting of a.) categorization, in which overt behaviour of the target is perceived; b.) characterization, where dispositional inferences about the target are drawn, and c.) correction, where these inferences are corrected or qualified by information on situational constraints. Whereas categorization is relatively automatic and effortless, characterization and especially correction are viewed as more effortful processes requiring conscious self-regulation (Gilbert et al., 1988). Consequently, when self-regulatory resources are low, correction is the first process to suffer in person perception, a notion that is in line with contemporary frameworks on impression formation (e.g., Fiske, Lin, & Neuberg, 1999). Hence, to the extent that the impression manager is successful in conveying the perception he or she desires, it may be sound advice to try to engage the observer in a task that taxes his/her regulatory resources in order to promote “freezing” on the established image and avoid any unwanted correction.

The Success of Social Influence Tactics Relies on Weakened Self-Regulation

Conscious self-regulation may be especially relevant in dyadic settings where the stakes are high, such as when people are confronted with sales personnel, fundraisers, politicians or other influence agents that want something from them.

Unfortunately (at least from the perspective of the target of influence), these are often also situations in which the target's limited resources are easily drained and the person becomes particularly susceptible to an influence attempt. This notion was examined in a series of studies by Fennis, Janssen, and Vohs (2007; see also Janssen, Fennis, Pruyn, & Vohs, in press). Almost all compliance-gaining procedures that influence professionals employ, and certainly the most researched ones, share one key characteristic: the presence of multiple decision moments, or sequential requests (Cialdini, 1993; Fern Monroe & Avrila, 1996). For example, the foot-in-the-door technique (Freedman & Fraser, 1966) starts with a small request, followed by a larger target request. Similarly, the door-in-the-face technique (Cialdini et al., 1975) starts with a larger request, followed by a smaller request. Fennis et al. (2007) argued that consciously attending and responding to these initial requests drains self-regulatory resources. The resulting state of regulatory resource depletion then increases the chances of compliance through the use of decisional heuristics that are embedded in the influence context. Six field and lab studies supported these notions and ruled out competing explanations. For example, in one study, Fennis et al. (2007) mimicked the opening stage of a typical foot-in-the-door ploy by presenting participants with a few introductory questions that either prompted active self-presentation (Experiment 1) or higher order cognitive processing (Experiment 2). Next, compliance with a target request was measured (Experiment 1) as well as performance on an unrelated task to assess resource depletion. In addition to increased compliance with the target request, both studies showed evidence of self-regulatory resource depletion in that participants who had been given the scripted influence treatment performed worse on the subsequent self-regulation task than other participants. In addition, the authors showed that a state of self-regulatory

failure increases susceptibility to the influence attempt by fostering the use of norms to guide decision making. Compliance among depleted participants increased as a function of employing the reciprocity norm (Experiment 4) or the liking norm (Experiment 5). Finally, Fennis et al (2007) used individual differences in trait self-control and a full sequential request technique (the “lowball technique”, Cialdini, 1993) and showed that the technique elicited compliance among people low (but not high) in trait self-control.

We may view increased reliance on decisional norms during self-regulatory resource depletion as a special case of behavior that is governed by the impulsive system (Strack & Deutsch, 2004). The authors proposed a two-system theory, the Reflective Impulsive Model of social behavior (RIM), which is comprised of parallel operating, rule-based reflective processes and also associative, impulsive processes. Vohs (2006) argued that the reflective system in the RIM is fueled by self-regulatory resources and therefore any context that drains self-control resources results in the impulsive system becoming a dominant force that influences behavior. Viewing compliance as an instance of impulsive behavior guided by salient social norms and produced by self-regulatory resource depletion is promising because such an approach would allow for a straightforward extension of the present results to at least two additional arenas to be addressed in future research: 1) new and as yet untested (from the present perspective) social influence techniques, such as those that make use of the principle of confusion (i.e., the disrupt-then-reframe technique; Fennis, Das & Pruyn, 2004) and 2) more extreme forms of social influence, such as coercive programs of compliance, conformity and intense indoctrination of the ilk that are occasionally used by religious cults or totalitarian regimes (Baron, 2000). With regard to the latter issue, Baron (2000) stated that such coercive programs typically start

with a “softening up” stage in which disorientation, social pressure, stress, sleep deprivation and confusion break down initial resistance by the target. Notably, reducing resistance by confusing the target also underlies the effectiveness of the disrupt-then-reframe technique (Fennis et al., 2004). Hence if self-regulatory resources and their depletion are found to play a role in these contexts (and we suspect that they do), then the collective results of present and future studies would point to the pivotal role of self-control in understanding social influence processes.

Societal and Interpersonal Benefits of Good Self-Control

In the domain of personal relationships, one can think about the importance of self-control for overriding selfish and self-interested impulses, focusing attention on one’s partner and not attractive alternates, being emotionally restrained, and myriad other behaviors that encourage interpersonal harmony (Baumeister, Schmeichel, & Vohs, 2005). As mentioned, failure to adhere to the standards of one’s relationship partners may lead to social rejection and thus exerting self-control in interpersonal relations is beneficial at both the personal and relational level. To illustrate, the following section will provide key social and interpersonal benefits of maintaining and exerting self-control.

Close Relationships

The way a person reacts to a partner’s bad behavior is a major ingredient of relationship success. The term accommodation refers to one’s willingness to restrain from reacting in kind (i.e., destructively) and instead engage in constructive responses when a partner has displayed relationship-damaging behavior (Rusbult et al., 1991). Research by Finkel and Campbell (1991; see also Finkel, this volume) demonstrated that accommodation depends on one’s ability to engage in good self-control. Through a series of studies they revealed that when the capacity for self-

control is weakened so are the odds of responding with an accommodation style during a relationship crisis.

In one study (Experiment 2), people who were in a romantic relationship were asked to watch segments from movies that evoked emotional responses. Half of the participants were asked to suppress their emotions whereas the other half was free to express their emotions to the emotional scenes. Suppressing emotions was hypothesized to be more demanding and require more self-regulatory resources than was not engaging in emotional modification. Subsequently, participants considered 12 hypothetical scenarios that described destructive behavior and indicated how they thought they would react. As expected, participants who had suppressed their emotions were less likely to say they would exhibit constructive behavior and also reported they would exhibit less loyalty to their partners following such destructive behaviors, as compared to participants whose emotions were not regulated. The latter group showed relationship-supportive behaviors, such as being constructive and loyal.

Self-control also has a beneficial impact on relationships through diminishing the self-serving bias. The self-serving bias occurs when people give themselves credit for good outcomes but blame outside factors for bad outcomes. This bias is strong and pervasive (Campbell & Sedikides, 1998), and is particularly problematic in intimate relationships and has been linked to relationship dissolution (Fincham & Bradbury, 1989).

One study tested whether overcoming the desire to engage in self-serving attributions for successes or failures requires self-regulatory resources (Vohs, Finkenauer, & Baumeister, 2008/unpublished). Couples came into the laboratory and either engaged in emotion regulation during an emotional film or watched the same

film without altering their emotions. Then they performed a task that involved building a structure with Logos, the popular building blocks for children. The experimenter returned and gave the couple feedback on their structure. She told them that the structure was one of the most creative she had seen or that it was one of the most pedestrian structures and in fact was the prototype given in the booklet that came with the blocks. This good or bad feedback set the stage for the couple to complete a form that asked about the responsibility that the participant took for the outcome. Sure enough, compared to couples who were allowed to respond naturally to the video, couples who had their self-regulatory resources depleted due to the emotion regulation task were less favorable toward their partner's involvement when the outcome was good but also saw the partner as having a larger role when the outcome was bad. Hence, overriding the desire to attribute good events to oneself and bad events to a partner requires self-regulatory resources, and when there are less of these available, relationship damaging behaviors can occur.

Self-control can also help maintain one's fidelity while in a relationship. According to a study by Miller (1997) prolonged eye gaze predicted relationship length: those who looked longer at a potential alternative mate were more likely to end their current relationship two months later. Vohs and Baumeister (2004) demonstrated that ignoring the impulse to look at alternative partners requires self-control.

Implicit Bargain

Baumeister, DeWall, Ciarocco, and Twenge (2005) claimed that social life comes with an implicit contract. This contract involves an exchange between the individual and society, with society benefiting from harmonious relations among people (who then create culture and keep the species going) and the individual

benefiting through gaining social inclusion. Hence one must suppress selfish impulses (e.g., creating interpersonal conflict, keeping one's money by not paying taxes) and conforming to social norms and, in return, one expects to be rewarded with social acceptance. Thus, being good at self-control ought to yield social benefits.

The bargain can breakdown, however. The individual can fail to regulate selfish tendencies or society can fail to reward a person for judicious self-control. Then what? At the individual level, when one fails to regulate selfish urges, the result can be rejection, divorce, unemployment, or even imprisonment. Conversely, when society fails to adhere to its part of the bargain – and the well-controlled person is deemed unacceptable by others – then the person may respond by failing to self-regulate (Baumeister et al., 2005). Despite the likely increase in desire to belong at this point, the person may be untrusting of the promise of social benefit and be demotivated to maintain self-control.

Research by Baumeister and colleagues (2005) proffered and bolstered this idea. Across several studies, participants who were socially rejected demonstrated less self-control than those who were socially accepted. According to the implicit bargain theory, failure to self-regulate would occur because the person perceives self-control effect as futile. One is not likely to forgo tempting pleasures to incur pain without rewards for doing so. But if a subsequent opportunity presents itself, in which engaging in self-control is perceived as increasing the chances of social acceptance, then rejected people may exert extra self-control to satisfy their need to belong. Additionally, individuals whose need to belong has already been satiated may exert less self-control, compared to those whose need to belong has yet been fulfilled.

DeWall, Baumeister, and Vohs (2008/under review) examined whether satisfying the need to belong influences self-control. Across eight experiments they

found support for the implicit bargain theory. Replicating the previous work, they found that socially excluded participants exhibited less self-control on a subsequent task than did participants who were socially accepted. Yet when the subsequent task was said to signal that the participant possessed beneficial interpersonal traits, socially rejected participants exerted more self-regulatory effort than those who were socially accepted.

In one study DeWall et al. (2008/under review), gave participants personality feedback that suggested they would spend their future alone (Future Alone condition) or that they would spend their future with others in fulfilling, long-term relationships (Future Belonging condition). Following the feedback, participants were asked to complete a performance self-control task that involved the board game Operation (see Vohs et al., 2004). Participants were either told that this task was diagnostic of personality traits that are desirable for relationships or were told nothing about the task's implications. Consistent with the hypotheses, Future Alone participants performed worse than Future Belonging participants when the subsequent self-control task was not diagnostic of future belongingness. In contrast, when the self-control task was diagnostic of future belongingness, the converse was demonstrated: Future Alone participants performed significantly better than did Future Belonging participants. Future Alone participants performed better to assert their chances for future social acceptance but Future Belonging participants had no reason to want to up their chances at being accepted, since their need to belong was satiated. Notably, Future Alone participants performed the worst among all the conditions. These same results were replicated in subsequent studies (Studies 2 and 6) using different self-control measures: dichotic listening and solving difficult anagrams.

The pattern of results for Future Alone participants was replicated in a follow-up study that was particularly interested in the impact of socially rejection (Study 3). In this study all participants were told they would spend their upcoming decades alone and then were asked to complete the Stroop task as a self-control performance task. In line with the implicit bargain notion, participants performed significantly better on the Stroop task when told that the task was diagnostic of social skills, compared to when they were told it was diagnostic of another good outcome, namely physical health. Thus, self-control exertion among the interpersonally rejected occurs when subsequent tasks ostensibly are predictive of future social success, whereas tasks that are predictive of other positive future outcomes do not motivate self-control in the same manner.

One additional study further examined the decrease in self-control among socially accepted people (Study 4). Participants who were told that they would spend their future with others in fulfilling, long-term relationships later endured a pain tolerance task that was said to be diagnostic of social skills less well than did their counterparts who were not told that the pain test was a social skills indicator. According to implicit contract notion (Baumeister et al., 2005), people who believe they will be a part of enduring social relationships have their need to belong satiated, which makes future opportunities to ensure social acceptance seem unnecessary.

In sum, this research enhances the social rejection and self-regulation literatures by demonstrating that social rejection does not necessarily decrease executive performance. The converse, that social acceptance does not necessarily enhance executive performance, was also shown. These data contribute to the nascent implicit bargain notion (Baumeister et al., 2005), insofar as they show a

bidirectional relationship between the degree to which people exert effort toward self-control and positive social ties.

Interpersonal Gains from Losing Self-Control

Most of the self-control literature focuses on the positive benefits of self-control (Tangney et al, 2004; Vohs & Baumeister, 2004). Resisting impulses to overeat, gamble, spend, or show aggression have been linked to positive outcomes, such as healthier lifestyles, better financial status, and solid interpersonal relationships (see Finkel & Campbell, 1991; Baumeister, Heatherton, & Tice, 1994). Thus, self-regulation improves the chances of attaining goals in these domains. Normatively, a self-control failure would mean giving into impulses and engaging in potentially harmful behaviors (i.e., overeating, gambling, overspending, aggressiveness). Although practicing self-regulation often leads to positive outcomes, the process of self-control, by definition, do not have prescribed positive or negative consequences; and even good self-control can lead to negative outcomes (Rawn & Vohs, 2008/in preparation).

An extensive narrative literature review by Rawn and Vohs (in preparation) revealed that people engage in personally-harmful behaviors (observationally, these behaviors look like losses of self-control) as a route to social acceptance. This behavior becomes an act of self-control when the behavior is deemed aversive by the person who is performing it. Hence, despite not wanting to perform an adverse behavior, people occasionally do just that because they perceive it will enhance social acceptance.

The initial aversion comes about because certain behaviors seem unpleasant, such as the taste of beer at first sip (Fallon & Rozin, 1983), or risky, such as illegal drug use. To engage in a behavior that the person finds aversive requires self-control

insofar as the person must override the initial impulses to avoid the behavior. The motive to fit in prompts people to overcome their dislike or fear in order to engage in the behavior. Rawn and Vohs call this the letting-go-fitting-in model and for the purposes of this chapter, selected instances in which people override initially aversive impulses in order to engage in risky behaviors will be presented. We focused on the domains of eating, alcohol, drug use, and deviant behavior.

Eating

There is great physical discomfort that comes from binge eating, which most people find aversive enough that they stop eating long before their stomach becomes painfully full. Hence, most people would find binge eating, which is a clinically-defined loss of self-control (American Psychiatric Association, 1994), aversive. Nonetheless, binge eating has been linked with being popular in some social circles. Crandall (1988) studied a university sorority that had a norm of heavy binge eating. In accordance with the letting-go-fitting-in model, women who overate to the degree expected by the members of the sorority became more popular over time than did women whose binge eating did not conform to the norm (Crandall, 1988). In short, these women presumably overcame painful physiological cues of satiation to reap the social benefits of popularity.

Alcohol

Rawn and Vohs (2008/in preparation) suggest that people engage in alcohol consumption for social reasons. Initially, the taste of alcohol is aversive to the senses (Fallon & Rozin, 1983). However, adolescents may drink as a means of social acceptance from peers (Rawn & Vohs, 2008/in preparation). There is some evidence that adolescent alcohol use is intended to match their peers' alcohol use. Perceptions of peers' alcohol use predicts participants' own alcohol experimentation (Jackson,

1997), and hence it may be that adolescents use alcohol to affiliate with their peers despite the fact that most people find the taste of alcohol initially offputting.

Drug Use

Drug use is perhaps less distasteful to start, but high in risk. The possibility of financial, physical, emotional, interpersonal, or legal costs grow with each occasion of use, and some people who begin to use drugs are in fact quite aware of its riskiness. In line with the letting-go-fitting in model, evidence suggests that people engage in drug use for interpersonal gain. One study by Wolfe, Lennox and Cutler (1986) demonstrated a strong relationship between incoming freshman who were concerned about acting in a socially appropriate manner and their use of recreational drugs (i.e., marijuana and alcohol) under peer pressure. In comparison, incoming freshman who were unconcerned about being socially accepted did not use recreational drugs when pressured by their peers. Despite the risks, then, university students who wanted badly to fit in responded to group pressure to do drugs by doing drugs.

Deviant Behavior

Delinquent behaviors (mainly seen among adolescents), such as property damage and graffiti, also show the letting-go-fitting in pattern. The public nature of these acts boosts the odds of getting caught, which may bring criminal records and fines. Pressure from peers, once again, has been implicated in who and why people engage in delinquent acts. Payne and Cornwell (2007) demonstrated that engaging in behaviors that one could tell were acceptable by one's social group strengthened interpersonal ties. That is, a person observing a friend of someone in their social group engaging in delinquent behavior was more likely later to engage in delinquent behavior, indicating that the tacit social approval from one's friend (of their friend) signaled that this was desirable behavior. Hence, even a silent signal of approval can

elicit delinquent behaviors among adolescents because it is paired with interpersonal inclusion.

Summary

This chapter has covered several spheres in which self-regulation plays a central role in group life. From early evolutionary pressures to get into and stay into a group to contemporary social demands involving aggressive salespersons or pressureful friends, self-control strengthens interpersonal ties. The limited-resource model of self-regulation is a useful tool for uncovering which aspects of cultural life are controlled and therefore taxing, and which are more natural. The implicit bargain helps explain why people who feel socially excluded sometimes fail to put forth effort on a self-control task. The contract between the self and society has been broken, and therefore maintaining good self-control seems pointless. But if another opportunity to gain social ties appears, rejected persons can motivate themselves and perform well on a self-regulation task – better, in fact, than people whose belongingness cup runneth over.

The need for self-regulation in the interpersonal realm is strong and unwavering. Just as in the personal realm, there are vast numbers of temptations now to lead people astray or merely make them lax in their efforts. As in the intrapersonal sphere, the costs of failing to achieve good interpersonal self-control are high. Although unlike the intrapsychic sphere, much attention has not been paid to the social side of self-regulation (cf. Vohs & Finkel, 2006). Psychologists have done their part to stress to the public and academia the importance of perseverance, hard work, and forgoing short-term treats for long-term rewards. We encourage psychologists join us in studying the repercussions of self-regulatory failure in social life.

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