

OVERPOWERING RESTRICTION: POWER REDUCES RESTRICTION AMONG SELF-CRITICAL PERFECTIONISTS

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Research finds that self-oriented perfectionism is a risk-factor for disordered eating. Failing to achieve extreme standards leads perfectionists to feel a lack of personal control. To regain a sense of control, some self-oriented perfectionists turn to dietary restriction. The present study used experimental methods to test the hypothesis that power, operationalized as situational resource control, might increase consumption among those high in self-oriented perfectionism. Ninety-six women (who met at least one criterion for anorexia nervosa), completed a lab study in which they were randomly assigned to either a power or control condition. In the power condition, participants expected to have power over an ostensible partner. In the control condition, participants expected to work as equals. Under the guise of a taste-test cover story, participants then had the opportunity to consume a liquid test meal, which was weighed and served as the study's central dependent measure. Individual differences in perfectionism were measured with self-report questionnaires. Consistent with hypotheses, among those high in self-oriented perfectionism, situational power increased caloric consumption. These results suggest that the psychological experience of power may be a protective factor for those at-risk for developing maladaptive patterns of eating.

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Having high standards can motivate people to better themselves. Yet, when individuals set excessively high standards, personal goals may frequently be unattainable and ultimately result in self-criticism, feelings of powerlessness, and a perceived loss of control (Dweck & Sorich, 1999; Flett, 1996). Consistent with this theorizing, research has supported a conceptualization of perfectionism that involves two main factors (Cox, Enns, & Clara, 2002; Dunkley, Blankstein, Masheb, & Grilo, 2006; Hill, Huelsman, & Araujo, 2010; Stoeber & Otto, 2006). These two types of perfectionism go by many different names in the literature, though oftentimes the factor considered to be more adaptive is referred to as perfectionistic strivings, whereas the factor thought to be more maladaptive is referred to as perfectionistic concerns. Individuals high on perfectionistic strivings engage in a rigid and relentless pursuit of perfection in the self, whereas individuals with perfectionistic concerns are overly distressed by how they are perceived by others and by fear of others' negative evaluation and criticism (Graham et al., 2010).

PERFECTIONISTIC STRIVINGS PERFECTIONISM AND RESTRICTION

Several lines of research from clinical and community samples have linked aspects of the perfectionistic strivings factor of perfectionism with symptoms of anorexia nervosa (AN). Both self-oriented perfectionism (SOP) and personal standards perfectionism load onto the perfectionistic strivings factor. In turn, SOP relates to dieting (Fitzsimmons-Craft, Bardone-Cone, Brownstone, & Harney, 2012) and restriction (Joyce, Watson, Egan, & Kane, 2012), and personal standards perfectionism is associated with drive for thinness (Boone, Soenens, Mouratidis et al., 2012). This work suggests that unrealistic personal standards—whether natural or experimentally induced (e.g., Shafran, Lee, Payne, & Fairborn, 2006)—can lead individuals to attempt to restrict their caloric intake and develop negative eating attitudes and behaviors. Further, although both SOP and socially prescribed perfectionism (SPP), which loads onto the perfectionistic concerns factor, have been linked to psychopathology generally (e.g., Bastiani, Rao, Weltzin, & Kaye, 1995; Cockell et al., 2002), SOP is linked more with anorexia nervosa (AN) than other disorders, such as anxiety or depressive disorders (Castor-Fornieles

et al., 2007). Importantly, SOP, but not SPP, has been found to be specifically related to restriction (Bardone-Cone et al., 2007; Watson, Raykos, Street, Fursland, & Nathan, 2011). This suggests that the SPP-restriction relationship reported in some studies may be spurious, and the result of shared variance with SOP.

Additional evidence for the causal relationship between perfectionistic strivings and restriction comes from both experimental and prospective studies. For instance, Shafran and colleagues (2006) found that experimentally induced personal standards from the perfectionistic strivings factor had adverse effects on eating disorder symptoms. They found that activating personal standards (by asking participants to pursue high standards for 24 hours) led participants to display greater avoidance of high fat foods, more attempts to restrict, and increased guilt after eating as compared to participants who were not asked to pursue high standards. Another recent study (Boone, Soenens, Vansteenkiste, & Braet, 2012) found that inducing high personal standards increased both state personal standards (which maps onto the perfectionist strivings factor) and state evaluative concerns (which maps onto the perfectionistic concerns factor); further, those in the high standards condition restricted food intake significantly more over the following 24 hours compared to individuals who were in the nonperfectionistic condition. The results of these studies suggest that the high personal standards engendered by the perfectionistic strivings construct can heighten restriction. High personal standards can put some individuals at risk for increased caloric restriction.

RESTRICTION AND CONTROL

People with eating disorders generally feel they have little control in their personal lives (Dalglish, Tchanturia, Serpell, Hems, de Silva, & Treasure, 2001). Indeed, early functional models of AN posited that a desire for control was a primary motivation for engaging in restriction (Slade, 1982). Clinicians have often speculated that patients may turn to restriction as a way to increase feelings of control (Roth, 1990). For instance, one patient with AN described her restriction as follows: "I think...it's a way of gaining control over your life...you have control over your food and it's something that like nobody can take away from you" (Dignon, Beardsmore, Spain,

& Kuan, 2006, p. 949). The sense of control that patients derive from restriction is believed to contribute to the ego-syntonic nature of the disorder. For instance, Serpell, Treasure, Teasdale, and Sullivan, (1999) found that individuals with AN feel their disorder provides them a sense of control and allows them to feel "safe and protected." In fact, AN patients have indicated that the sense of control their disorder provides is one of the most positive aspects of having the disorder (Serpell et al., 2004). Thus, although the behavior of restricting is maladaptive, patients report engaging in pronounced dietary restriction to regain personal control amidst pervasive feelings of dysregulation (Dignon et al., 2006). Given that some people use dietary restriction as a means to gain control, it follows that putting people in a position of power (operationally defined as control over resources and other people) may satisfy desires for control and thereby reduce the drive to restrict.

THE PSYCHOLOGICAL EXPERIENCE OF POWER

The recent literature defines power as asymmetric interpersonal resource and outcome control (e.g., Keltner, Gruenfeld, & Anderson, 2003; Magee & Smith, 2013). When people have the capacity to control others' outcomes (i.e., have power), they are relatively freed from the sanctions, judgments, and punishments of others. To be in power means to be relatively unconstrained by the actions, opinions, and objections of others. Moreover, in addition to this freedom, interpersonal resource control also affords powerful people increased access to benefits and rewards not available to the powerless. Hence, compared to the powerless, the powerful feel greater confidence and security because they have more resources to achieve their goals and are less subject to the judgments and evaluations of others (e.g., Briñol, Petty, Valle, Rucker, & Becerra, 2007; Magee & Galinsky, 2008).

In keeping with this definition, research over the past decade illustrates that controlling other people's outcomes fundamentally changes the way individuals think about themselves and respond to the social environment (e.g., Anderson & Berdahl, 2002; Galinsky, Gruenfeld, & Magee, 2003; Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008; Joshi & Fast, 2013). Such research finds that interpersonal outcome control satisfies individuals' basic needs for au-

tonomy and enhances (often beyond realistic limits) powerholders' perceived control over their world (Fast, Gruenfeld, Sivanathan, & Galinsky, 2009; Inesi, Botti, Dubois, Rucker, & Galinsky, 2011). For example, experimental evidence suggests that compared to controls, power buffers individuals against threats to autonomy like reduced choice (Inesi et al., 2011). Power also leads to unrealistic perceptions of control over the social world. For instance, Fast and colleagues (2009) found that the psychological experience of power heightened participants' beliefs that they could affect events that were objectively beyond their control (e.g., the outcome of personally rolling dice; singlehandedly affecting the results of a national election). These studies illustrate that control is central to the experience of power. Power fulfills and protects basic needs for control and enhances individuals' beliefs about their ability to exert control over the environment (Fast et al., 2009; Inesi et al., 2011).

POWER, RESTRICTION, AND CONSUMPTION

Drawing on power-approach theory, which asserts that power leads people to become more approach-oriented (see Keltner et al., 2003 for review), there are reasons to predict that situational power might decrease restriction. First, as noted above, the situational control afforded by power satisfies basic needs for autonomy and personal control (e.g., Fast et al., 2009; Inesi et al., 2011). Consequently, people who have power may not need to resort to dietary restriction in order to increase their sense of control. Consistent with this thinking, Strong and Huon (1998) found that participants whose parents made them feel empowered and autonomous reported a lower drive for thinness. From this perspective, power may have particularly strong effects on the eating habits of self-oriented perfectionists, because it should satisfy those individuals' acute desires for control (e.g., Shafran, Cooper, & Fairburn, 2002).

Second, power might reduce restriction because it disinhibits behavior (Keltner et al., 2003). Power makes people more likely to share their thoughts and feelings and act in line with their inner urges (e.g., Anderson & Berdahl, 2002; Galinsky et al., 2003; Inesi, 2010; Smith & Bargh, 2008). For example, when given the opportunity to eat cookies in an experiment, leaders (compared to subordinates) were more likely to eat in a disinhibited manner, chewing with their mouths open and leaving crumbs on their faces and table

(Ward & Keltner, 1998). Thus, power might disinhibit people high in SOP, thereby increasing consumption.

Third, power might decrease restriction because it attunes people to internal states like hunger (Guinote, 2010). Consistent with this reasoning, research finds that power enhances the effect internal states and dispositions have on behavior (e.g., Chen, Lee-Chai, & Bargh, 2001). Compared to controls, when in power, hungry people eat (Guinote, 2010) and happy people smile (Hecht & LaFrance, 1998). Hence, power may have particularly strong effects on those high in SOP because those individuals may be restricting and thus may be hungrier than those low in SOP (Boone, Soenens, Vansteenkiste, & Braet, 2012). For perfectionists who are actively restricting, power may make hunger salient, ultimately increasing consumption.

In addition to the above theorizing, there are additional reasons to predict that power may have particularly strong effects on those high in self-oriented perfectionism. By definition, SOP is characterized by unreasonably high personal standards that lead individuals to excessively check their performance and display heightened fears of failure and self-criticism (Frost, Marten, Lahart, & Rosenblate, 1990; Shafran & Mansell, 2001). By contrast, power reduces self-criticism and negative affect, while simultaneously increasing positive self-perceptions, feelings of authenticity, confidence, and subjective well-being (e.g., Briñol et al., 2007; Fast, Sivanathan, Mayer, & Galinsky, 2012; Kifer, Heller, Perunovic, & Galinsky, 2013; Lammers, Stapel, & Galinsky, 2010; Wojciszke & Struzynska-Kujalowski, 2007). Consequently, those high in SOP may have the most to gain from the experience of power. Power may soothe precisely those tendencies (e.g., self-criticism, high personal standards, perceived loss of control) that lead self-oriented perfectionists to restrict (e.g., Boone, Soenens, Vansteenkiste, & Braet, 2012; Shafran et al., 2006). As a result, power may increase consumption particularly among self-oriented perfectionists. By contrast, those low in SOP may glean fewer benefits from power because they have lower personal standards and are less critical of themselves than those high in SOP. In keeping with this theorizing, we hypothesize that power should increase consumption especially among those high in self-oriented perfectionism.

Additionally, there is reason to suspect that power's effect on SOP may not extend to individuals with socially prescribed forms of per-

fectionism, such as SPP (Garner, Olmsted, & Polivy, 1983; Joyce et al., 2012). As noted above, SPP is rooted in concerns with failing to meet others' standards and fear of negative social evaluations (Graham et al., 2010). The presence of these evaluative concerns is noteworthy because recent research suggests that those with strong concerns about negative social evaluation (e.g., nonclinical social anxiety) are resistant to power's psychological effects (Maner, Gailiot, Menzel, & Kunstman, 2012)—they do not respond to power with increases in disinhibition or perceived control. By extension, the evaluative concerns that characterize socially prescribed perfectionists might similarly shield them from the psychological effect of power. Hence, power's capacity to increase consumption among those high in SOP may not extend to those high in SPP.

In summary, there are reasons for thinking that power might decrease restriction among those high in SOP because it satisfies desires for control, reduces self-criticism, increases confidence, inhibits regulatory processes needed to engage in dietary restraint, all the while making hunger salient. In other words, power may reduce the drive and capacity to restrict while simultaneously increasing awareness of hunger. In light of this theorizing, we hypothesize that although power may yield a main effect on consumption—such that those in power consume more than control participants—power and perfectionism will interact to jointly determine caloric consumption. Specifically, we hypothesize that participants high in SOP will consume more in the power condition than in the control condition. Moreover, because concerns with social evaluation have been shown to buffer against power's psychological effects (e.g., Maner et al., 2012), we further predict that power's effect on those high in SOP will not extend to those high in SPP. We anticipate that the evaluative concerns characteristic of SPP will block power's effect on consumption.

CURRENT WORK

The current work integrates power-approach theory with clinical research on eating disorder risk factors to test whether situational power can attenuate the link between SOP and reduced caloric intake. Specifically, we tested whether power would increase consumption among women high in SOP. We did so with a lab study in which we manipulated power and then measured consumption be-

havior. In the power condition, participants were led to believe they were the leader of an experimental dyad and would have control over their team's outcomes and rewards. In the control condition, participants were led to believe they would work and share equally in the dyad's rewards. In keeping with the study's taste-test cover story, participants then had the opportunity to consume a nutrition shake. To calculate consumption, the shake was measured before and after participants sampled the drink. Although we predicted a positive relationship between SOP and restriction in the control condition (providing further evidence for the SOP-restriction link), we expected that power would attenuate this effect. Moreover, among those high in SOP, we predicted that power would increase consumption compared to those in the control condition.

METHOD

Participants

Participants were drawn from introductory psychology courses; this pool of students is 83% female and ranged from 17–25 years of age ($M = 18.5$, $SD = 1.31$). Participants' average Body-Mass Index (BMI) was 22.95 ($SD = 4.03$). This study was approved by the university institutional review board, and students participated in the current study in exchange for course credit. Ninety-six White female undergraduates were recruited from this subject pool to take part in the current study. Participants were recruited based on their responses to a department-wide prescreening (see below for more detail). Consumption data from six participants were identified as outliers (consumption scores greater than 2.5 SD above the mean). Preliminary regression analyses revealed that consumption scores from these participants had excessive influence on the regression line of best fit (average DFFITS = 20.11). In keeping with recommendations from Bollen and Jackman (1990; see also Stevens, 1984), data from these participants were not included in subsequent analyses.¹

1. When these six outliers are included in analyses predicting shake consumption, the main effect of the time since last meal covariate $t(92) = .76$, $p = .45$ and the interaction between power condition and SOP drop to nonsignificance $t(92) = .18$, $p = .86$. Considering that these outliers consumed on average *nearly eight times* more shake ($M_{\text{outlier}} = 284.64$ g, $SD = 83.09$ g) than the mean for rest of the sample ($M = 36.62$ g, $SD = 35.7$ g), the resultant error variance generated by these extreme scores obscured the otherwise visible interaction between SOP and condition.

Data from three additional participants were excluded for suspicion regarding the authenticity of the prospective partner.

In order to ensure that participants had sufficient elevations of dietary restriction, we recruited participants who evidenced symptoms of AN according to the *Diagnostic and Statistical Manual of Mental Disorders-IV-TR* (i.e., missing more than 3 periods in a row, weighing less than they believed others thought they should, placing undue evaluation on weight and shape, worrying about gaining weight or becoming fat; American Psychological Association, 2000). Introductory Psychology students completed an eating behaviors survey during a mass testing procedure at the beginning of the semester and students experiencing at least two out of the four symptoms were invited to participate ($n = 29$). In order to increase recruitment, we then opened the experiment up to students experiencing at least one of the four symptoms.

Measures

Self-oriented and socially prescribed perfectionism were assessed with the Self-Oriented Perfectionism (SOP) and Socially Prescribed Perfectionism (SPP) subscales of the Eating Disorder Inventory (Garner et al., 1983; Joyce et al., 2012). The SOP subscale is composed of three items (I hate being less than the best at things, I feel that I must do things perfectly, or not do them at all, and I have extremely high goals; $\alpha = .75$). The SPP subscale also included three items (e.g., Only outstanding performance is good enough in my family, As a child, I tried very hard to avoid disappointing my parents and teachers, My parents have expected excellence of me; $\alpha = .65$). Participants were asked how frequently these statements described them on Likert scales that ranged from 1 (Never) to 6 (Always), which were then averaged to create an index of self-oriented perfectionism ($M = 4.45$, $SD = 1.05$, range = 2.00–6.00) and socially prescribed perfectionism ($M = 4.18$, $SD = .99$, range = 2.00–6.00). The SOP and SPP subscales have been found to be highly correlated with the self-oriented and socially prescribed dimensions ($r = .77$, $.59$, respectively; Bardone-Cone et al., 2007) of the Multidimensional Perfectionism Scale (Hewitt & Flett, 1991), which is a well-validated measure of perfectionism. No manipulation check of power was included, although it should be noted that the manipulation

has been well-validated in several previous studies (e.g., Galinsky et al., 2003, 2008).

Design and Procedure

In line with other studies using liquid test meals (e.g., Sysko, Devlin, Walsh, Zimmerli, & Kissileff, 2007), participants were asked to fast for two hours before their experimental session; participants also reported the time of their last meal.² Participants arrived at the lab individually expecting to work with a partner in an experiment about team-work and marketing. In keeping with this cover story, participants first completed a brief questionnaire about their leadership goals that was ostensibly used to assign roles in the experiment (see Galinsky et al., 2003; Kunstman & Maner, 2011; Mead & Maner, 2012 for a similar procedure). In reality, participants were randomly assigned to the power condition or the control condition. In the power condition, participants learned that they had scored higher than their partner on the leadership questionnaire and were thus the most qualified to act as the leader for their group. As the leader, participants learned that they would have control over how the study's alleged rewards (tickets in a 100 dollar raffle) would be divided between themselves and their partner. In the control condition, participants also learned that they had scored highly on the measure of natural leadership potential. However, unlike the power condition, control participants were told that they and their partner would have equal authority over the task and would divide the study's rewards equally.

Participants then learned that as part of the marketing portion of the task, they would need to develop new names and marketing strategies for a fictional beverage called Tasty Shake (actually the dietary supplement Ensure®, complete nutritional liquid meal, Abbott Laboratories). Participants were led to believe they would first taste and evaluate the shake individually and then work with their partner to create a new name and marketing plan for the product. Participants were then presented with a cup with approximately 360 grams (1.5 cups) of Ensure® from which to make their evalua-

2. Because we used a nonclinical university sample we reduced the fasting time from 6 hours used in past research (Sysko et al., 2007).

TABLE 1. Bivariate Correlations and Descriptive Statistics

	1	2	3	4	Mean	SD	α
1. Shake Consumed (g)	—	.11***	-.05***	-.28†	38.13 ⁺	41.83	
2. SOP	-.33***	—	.59***	-.02	4.05 ⁺⁺	1.09 ⁺	.72
3. SPP	-.21***	.50***	—	.11*	4.18 ⁺⁺	1.02 ⁺	.59
4. Mins Since Last Meal	-.08***	-.16***	-.13***	—	281.74	288.12	
Mean	35.08	4.07	4.18	227.16			
SD	28.69	1.00	.97 ⁺	269.57			
α		.79 ⁺	.72 ⁺				

Note. Correlations and descriptive statistics in the power condition are above the diagonal. Correlations and descriptive statistics below the diagonal derive from the control condition. ***denotes $p < .001$; * denotes $p < .05$ level; †denotes $p \leq .07$.

tions. Participants were instructed to drink as much of the shake as they liked. Experimenters weighed each cup before and after giving it to participants. Difference scores were calculated to determine how much Ensure[®] participants consumed. After drinking the Ensure[®] and completing a brief questionnaire to reinforce the study’s cover story, participants completed a short survey that included the EDI-SOP and EDI-SPP.³

RESULTS

Preliminary correlation analyses first assessed the relationships between SOP, SPP, minutes since participants’ last meal, and consumption in the power and control conditions (see Table 1). To test whether SOP moderated power’s effect on consumption, we conducted a hierarchical multiple regression analysis in which minutes since last meal, condition (power/control), SOP, and the interaction between SOP and group were included as predictors of shake consumption. Following procedures outlined by Aiken and West (1991), all variables were mean-centered (power condition = .52,

3. Preliminary analyses first tested whether the power manipulation had an effect on SOP and SPP. To test this possibility, independent samples *t*-tests were conducted on participants’ SOP and SPP scores. Results of these analyses confirmed random assignment successfully distributed perfectionists between conditions and power did not have an effect on SOP, $t(85) = -.10, p = .92$, or SPP, $t(85) = -.02, p = .98$. These results are also consistent with past work on power (e.g., Kunstman & Maner, 2011; Kunstman & Shoda, 2014; Maner & Mead, 2010), which find that laboratory manipulations of power do not alter stable personality traits.

control condition coded = -.48). The number of minutes since participants' last meal was entered as a covariate in the first step of the regression analysis.⁴ Main effects corresponding to SOP and power condition were entered in step two. The SOP and power interaction term was entered into the third step of the model. Results of each step of this analysis are reported in Table 2.

Although neither the main effect of SOP nor power reached significance in step two of the regression analysis ($ts < |1.50|$, $ps > .14$), the predicted interaction of SOP and power was significant when included in step 3 of the regression analysis, $F(1, 82) = 3.07$, $p = .02$, $\Delta R^2 = .06$ (see Figure 1). Follow-up simple-effects tests revealed that in the control condition, there was an inverse relationship between SOP and consumption, $t(86) = -2.79$, $p = .007$, $\beta = -.42$, $r_{\text{partial}} = -.29$, such that women high in SOP consumed substantially less than women low in SOP. Conversely, in the power condition, the relationship between SOP and restriction was attenuated, $t(86) = .53$, $p = .60$, $\beta = .074$, $r_{\text{partial}} = .06$.

To interpret the interaction in a different way, we tested the effect of experimental condition at the highest (uncentered SOP score = 6.00) and lowest (uncentered SOP score = 2.00) levels of perfectionism in the sample. We focused on these extreme values because high levels of perfectionism can negatively impact eating pathology (e.g., Bardone-Cone et al., 2007; McVey, Pepler, Davis, Flett, & Abdoell, 2002). Consistent with hypotheses, at high levels of perfectionism, there was a significant simple effect of condition, $t(86) = 2.02$, $p = .047$, $\beta = .47$, $r_{\text{partial}} = .22$, such that participants in the power condition consumed more than those in the control condition. Similar analyses conducted on those low in SOP also revealed a significant simple effect of condition, $t(86) = -2.35$, $p = .021$, $\beta = -.53$, $r_{\text{partial}} = -.25$, such that those in the control condition consumed more shake than those in the power condition. Although unexpected, this last result suggests that power decreased consumption among those low in SOP, perhaps reflecting increased task-relevant

4. Additional analyses tested whether the interaction between power condition and SOP remained significant after controlling for (1) participant BMI or (2) ratings of the shake's taste. When BMI was entered into the regression equation, the interaction between condition and SOP remained significant, $t(86) = 2.29$, $\beta = .24$, $p = .025$. Preference for the shake was evaluated with a single Likert-scaled item (All things considered, I think this is a good shake). When self-report ratings of the shake's taste were included as a covariate, the interaction term of power condition and SOP remained a significant predictor of shake consumption, $t(85) = 2.23$, $\beta = .22$, $p = .029$.

TABLE 2. Summary of the Moderated Hierarchical Linear Regression Analysis Predicting Shake Consumption from SOP and Power Condition, Covarying Time Since Participants' Last Meal

	Step 1 (mins since last meal)				Step 2 (SOP and Power)				Step 3 (SOP × Power Interaction)						
	Overall Step				Overall Step				Overall Step						
	R ²	df	F	β	b(SE)	ΔR ²	df	F	β	b(SE)	ΔR ²	df	F	β	b(SE)
Shake Consumed	.04	1, 85	3.94*	-.21	-.027 (.014)	.02	2, 83	2.04	-.15	-5.31 (3.64)	.06	1, 82	3.07*	.25	17.11 (7.11)

Note. * denotes significance at the .05 level. Power and SOP interact to significantly predict shake consumption. Estimated standard errors are represented in parenthesis.

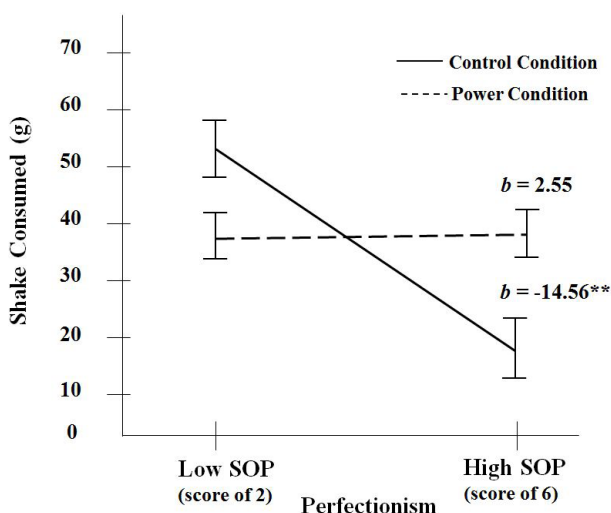


FIGURE 1. Power attenuates the effect of SOP on restriction. SOP = Self-Oriented Perfectionism. Alternate simple effects tests reveal that among those high in SOP, power increased consumption compared to control $b = 31.66$, $p < .05$. At low levels of SOP, control participants consumed more shake than those in power, $b = -36.67$, $p < .05$. b refers to unstandardized regression coefficients, $*p < .05$. $**p \leq .01$. Error bars indicate estimated standard errors.

self-regulation among those individuals (e.g., DeWall, Baumeister, Mead, & Vohs, 2011).

Another hierarchical regression analysis was conducted predicting consumption from power, SPP, and their interaction. Minutes since participants' last meal was entered in step one, main effects were entered in step two, and the interaction of power and SPP was entered in step 3 of the regression equation. Consistent with hypotheses, no effects related to power, SPP, or their interaction reached significance, $ts < |1.25|$, $ps > .20$. Full results are available upon request from the first author.

GENERAL DISCUSSION

The current study provides initial evidence that empowering perfectionistic women decreases caloric restriction. Although there was a strong positive relationship between SOP and restriction in the control condition, power eliminated that relationship in the power

condition. Moreover, among women high in perfectionism, power (compared to control) increased consumption. Although there was no main effect of power, power and perfectionism jointly determined consumption. For women high in SOP, situational control (i.e., power) seems to serve a protective psychological function that encourages consumption and reduces restriction.

Power's effect on SOP, however, did not generalize to socially prescribed perfectionism. Consistent with past work, which finds that concerns with negative social evaluation block power's effects (Maner et al., 2012), power did not influence the eating habits of those high in SPP. These results suggest that power may have the most beneficial effects on individuals driven by personal (as opposed to social) standards.

In addition to extending research on disordered eating, the present work also advances research on power by providing evidence for power's protective effects. Previous work suggests that power helps fulfill basic psychological needs such as the need for control and, in doing so, buffers against negative evaluation, self-criticism, and promotes physical and emotional well-being (Keltner et al., 2003; Kifer et al., 2013; Lammers et al., 2010). The results of the current study suggest that the resource control afforded by power can also attenuate problematic behaviors like dietary restriction. Although past research has found that power has important psychological benefits (e.g., Inesi et al., 2011; Keltner et al., 2003), less research has tested power's capacity to decrease maladaptive behaviors. The current study helps fill this gap in the literature and suggests that power's protective effects extend beyond the fulfillment of basic psychological needs to also attenuate certain maladaptive behaviors.

CLINICAL IMPLICATIONS

The current study extends research on perfectionism's role in eating disorders by providing experimental evidence that, among at-risk individuals, situational power can increase consumption. Whereas previous clinical studies suggest that perceived loss of control and social status can increase restriction for those high in SOP (e.g., Dignon et al., 2006), the current findings imply that increasing situational power can attenuate the relationship between SOP and restriction. These results complement and extend theories of eating

disorders that emphasize the effect of social rank on disordered eating behaviors like restriction (Abed, 1998).

These results also provide encouraging evidence for psychological interventions targeting the prevention and treatment of eating disorders. Findings from the present study suggest that therapeutic approaches aimed at improving perceived situational control might reduce restriction among at-risk individuals. These results complement treatment approaches like Dialectical Behavior Therapy (DBT), which focus on increasing interpersonal effectiveness and building mastery and self-respect (Linehan, 1993). For instance, assertiveness training might be particularly helpful for people who report using restrictive eating behaviors as means to increase their sense of control. In addition to emphasizing individuals' situational forms of control, clinicians may also seek to directly emphasize personal control. For instance, clinicians may wish to incorporate aspects of self-determination theory (Deci & Ryan, 1985), such as autonomy support, when possible in their work with clients. This autonomy support could entail giving clients' choices over aspects of their treatment, such as homework assignments. Having input in one's treatment options may provide a sense of power that ultimately defuses drives to restrict. These results highlight the importance of therapies that directly address clinical perfectionism, such as enhanced cognitive behavioral therapy (CBT-E; Fairburn, 2008). Several studies, including the current work, find that SOP is related to restriction (e.g., Bardone-Cone et al., 2007; Shafran et al., 2006). Thus, for high SOP individuals, interventions like CBT-E, that target maladaptive perfectionism by addressing behaviors such as goal setting and performance checking, may be warranted.

Although this research offers encouraging evidence for those actively restricting, power may not have such positive effects on those whose eating pathology includes episodes of binge eating (e.g., individuals with bulimia nervosa or binge eating disorder). To the extent that power disinhibits behavior and reduces personal standards (e.g., Keltner et al., 2003; Lammers et al., 2010), power could decrease self-monitoring and inadvertently set the stage for binge eating (i.e., power could trigger binge eating because individuals do not monitor their eating goals and behavior). Consequently, clinicians may wish to carefully consider the use of situational power manipulations among clients with certain forms of eating pathology (i.e., binge eating).

LIMITATIONS AND FUTURE DIRECTIONS

Limitations of the current study provide useful avenues for future research. One limitation of the present work is the use of a nonclinical sample. Those diagnosed with an eating disorder experience strong drives to restrict as a means to exert control over their lives. Thus, experimental manipulations of power may have even greater effects on restriction among clinically diagnosed participants compared to those in the current nonclinical sample, although this remains an empirical question. Additionally, our sample was female and White; thus, it is not clear whether these results will generalize to other populations. Recent research suggests that for men, in addition to the drive for muscularity, the drive for leanness is also related to disordered eating behaviors (Smith, Hawkeswood, Bodell, & Joiner, 2011). Further, research has found that African American women have lower levels of restriction as compared to White women (Striegel-Moore & Bulik, 2007). Thus, future work should examine power's effect on drive for muscularity and leanness among men and dietary restriction among non-White populations.

Researchers might also investigate whether power's effect on restriction is moderated by other measures of SPP. In the current study, the internal reliability for SPP was relatively low and may have increased Type II error. Future studies might employ other, more reliable measures to better assess power's effect on those high (and low) in SPP.

In the future, researchers might also investigate which psychological mechanisms are responsible for power's attenuating effect on restriction. As outlined above, power-approach theory suggests that power might decrease restriction because it provides a sense of control, reduces self-criticism, disinhibits behavior, and puts people in touch with internal states like hunger. Although all these mechanisms may provide fruitful insights into eating disorders, testing whether power increases awareness of bodily states like hunger and satiety may be especially important as deficits in interoceptive awareness (i.e., awareness of bodily signals) are common to eating disorders (Pollatos et al., 2008). For example, among people with anorexia, being unaware of the experience of hunger enables restriction, and among people with bulimia, dysregulated satiety signals are associated with bingeing (e.g., Jimerson, Mantzoros, Wolfe, & Metzger, 2000; Monteleone, Martiadis, Fabrazzo, Serritella, & Maj,

2003). Hence, testing whether experimental power manipulations can improve interoceptive awareness not only provides insight into the psychological mechanisms behind power's effect on restriction, it might also have useful treatment and research applications for a variety of eating disorders.

The present work provides encouraging behavioral evidence for power's positive effect on those at risk for developing an eating disorder, and researchers might also test whether power has positive cognitive effects for these individuals. Past research suggests that power can produce positive self-perceptions, leading people to think that others like or desire them (e.g., Anderson & Berdahl, 2002; Kunstman & Maner, 2011). By extension, power might also improve body image. These possibilities provide useful opportunities for further research.

Future research might also test whether cognitive approaches to therapy that emphasize interpersonal resource control (i.e., power) are helpful at reducing restriction. For example, a common therapeutic technique in Cognitive Behavioral Therapy involves teaching individuals to reframe their thoughts to be more realistic and/or adaptive. In keeping with this technique, therapists might encourage clients to focus on situational resources under their control. Enhancing perceptions of situational power may heighten feelings of personal control (e.g., Inesi et al., 2011) and in turn help to reduce restriction. Future research should explore power's potential to improve cognitive treatments for eating disorders.

CONCLUDING REMARKS

The present study provides evidence for power's protective effects among self-oriented perfectionists who may be at risk for developing eating disorders. Power attenuated the perfectionism-restriction link and led to increased consumption among those high in perfectionism. Although much has been said about power's capacity to corrupt (e.g., Kipnis, 1972), these results illustrate that power can also protect. They also highlight the potential for social psychological theories of power to inform the study of clinical and at-risk populations. The diverse and pervasive psychological effects of power can inform a wide-array of issues beyond the boundaries of traditional social psychology.

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