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How power corrupts relationships: Cynical attributions for others' generous acts

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ABSTRACT

Five studies explored whether power undermines the quality of relationships by creating instrumental attributions for generous acts. We predicted that this cynical view of others' intentions would impede responses that nurture healthy relationships. In the first three studies, the powerful were more likely to believe that the favors they received were offered for the favor-giver's instrumental purposes, thereby reducing power-holders' thankfulness, desire to reciprocate, and trust. These effects emerged when power was manipulated through hierarchical roles or primed semantically, and when participants recalled past favors or imagined future ones. Using income disparity as a proxy for power, Study 4 found that instrumental attributions for favors in marriages led to lower levels of reported relationship commitment among high-power spouses. Study 5 provided evidence that favors are critical in triggering power-holders' diminished trust. We connect our theory and findings to both a political scientist's writings on the nature of love and power almost half a century ago as well as the dilemma voiced by many celebrities who find true relatedness elusive. Overall, power provides a reason to doubt the purity of others' favors, creating a cynical perspective on others' generosity that undermines relationships.

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... the more men the master holds bound to his will, the more he is aware of his loneliness. His success in terms of power only serves to illuminate his failure in terms of love.

- Morgenthau (1962)

Introduction

Among the many insights that have emerged in recent research on the psychology of power is the observation that power can alter social perception in ways that seem likely to corrupt social relationships (see Fiske, 2010 for a review). For example, power often reduces pro-social behavior (Piff, Kraus, Côté, Cheng, & Keltner, 2010), increases the tendency to rely on stereotypes when forming impressions (Fiske, 1993; Goodwin, Gubin, Fiske, & Yzerbyt, 2000) and reduces accuracy in inferring others' perspectives, emotions and attitudes (Ebenbach & Keltner, 1998; Galinsky, Magee, Inesi, & Gruenfeld, 2006; Kraus, Côté, & Keltner, 2010; Snodgrass, 1985, 1992). These

findings are consistent with the observation that power tends to create psychological and emotional distance from other people (Lammers et al., in press; Smith & Trope, 2006; Van Kleef et al., 2008).

An important feature of this recent approach to understanding the effects of power is the assumption that possessing power shifts individuals' focus of attention away from others' interests and experiences and toward more personal ones (Gruenfeld, Inesi, Magee, & Galinsky, 2008; Keltner, Gruenfeld, & Anderson, 2003; Rios, Gruenfeld, & Fast, 2011), but does not affect the meaning of what is observed in others' actions. In contrast, earlier work on the psychology of power (e.g., Kipnis, Castell, Gergen, & Mauch, 1976) assumed that power-holders are aware of the asymmetrical dependence in their relationships and that this knowledge changes social perceptions by altering interpretations of others' behavior. For example, Kipnis (1972) found that managers with power devalued the contributions of subordinates because they attributed subordinates' good performance to their own ability to reward and punish. Similarly, Kramer (1994) theorized that the powerful are more prone to paranoia because they tend to form self-referential attributions for others' ambiguous behaviors.

The tendency for power to incite cynical attribution processes was poignantly described in an essay by political scientist Hans Morgenthau (1962), in which he argued that power impedes the development of relationships by providing a reason to doubt the purity of others' expressions of kindness. He presumed that the powerful cannot escape the knowledge that they are the targets of manipulation by others who desire access to the rewards they control. Thus, those in power are unable to fully trust

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the intentions of low-power parties, leaving the powerful feeling psychologically distant, despite others' attempts to be close.

Although Morgenthau focused on romantic love, we believe that the sentiments expressed in his essay reflect the effects of power on relationships more generally. Indeed, the rich and famous, despite being surrounded by seemingly benevolent faces, often point to their celebrity as an impediment to the development of meaningful relationships (Cavanagh, 2010; see also Malhotra & Murnighan, 2002, for a related argument on how legal contracts reduce interpersonal trust). These considerations suggest that an awareness of one's own power provides the basis for cynical attributions in response to others' kindness.

We propose that, because unsolicited favors prompt a search for causality (e.g., Schopler & Thompson, 1968), a recipient's power will emerge as a plausible cause of a subordinate's favor, consequently diminishing the possibility that the favor was driven by benevolent motives (Kelley, 1972). That is, we assume that when the powerful receive favors from a subordinate, they are more likely to infer that the favor was motivated by a desire to gain access to their valued resources. We refer to this process of inferring that favors are motivated by instrumental and selfish, rather than generous and selfless concerns, as *cynical attribution*.

Because beliefs about the drivers of a favor inform subsequent responses (Ames, Flynn, & Weber, 2004; Greenberg & Frisch, 1973; Schopler & Thompson, 1968), we predicted that power would impede the very responses to a favor on which relationships are built, such as thankfulness and the desire to reciprocate. Furthermore, since the belief in others' benevolence is a key underpinning of trust (Berscheid & Reis, 1998; Rempel, Holmes, & Zanna, 1985), we predicted that power-holders' instrumental attributions would reduce their feelings of trust toward relationship partners. Finally, since trust is an important indicator of how much to commit to a relationship (Larzelere & Huston, 1980; Wieselquist, Rusbult, Foster, & Agnew, 1999), we predicted lower relationship commitment among the powerful.

Our theory represents a significant departure from recent work on the effects of power. Much of this research has emphasized how power affects goals and goal pursuit and assumes that power-holders are to a large extent inattentive, if not oblivious, to the asymmetries in their relationships (e.g., Guinote, 2008; Keltner et al., 2003; Overbeck & Park, 2001). According to these accounts, the effects of power are not linked to distinct interpersonal interactions that occur within the context of asymmetric dependence, but rather emerge out of the mere activation of neuropsychological forces and systems (e.g. the behavioral approach system). This reigning theoretical perspective would suggest that power affects interpersonal relationships because power-holders are less focused on others in general (e.g., Fiske, 1993; Galinsky et al., 2006). In contrast to this landscape, the current research explores the possibility that certain types of subordinate actions trigger an explicit awareness among the powerful that they have asymmetric control over valued resources (Emerson, 1962), which then colors their interpretation of those actions. Thus, our theoretical perspective suggests that power may damage interpersonal relations not only by altering the *amount* of attention paid to others, but also by shifting the *meaning* of others' actions.

The current research also serves to expand our understanding of the mechanisms that impede interpersonal connectedness among the powerful. Overall, we provide a causal model demonstrating that one driving factor behind the "loneliness at the top" phenomenon (Lee & Tiedens, 2001) is power-holders' cynical interpretation of others' kind acts, which then inhibit relationship-building responses. By altering the meaning of other's actions, power produces an interpretive lens that serves to impede the development of meaningful connections.

Overview

We tested our hypotheses across a variety of manipulations of power, favor contexts, and relationship types. We examined the effects of power on responses to actual favors participants had recently received (Study 1), to imagined favors in professional (Studies 2 and

3) and marital (Study 4) relationships, and to a real favor offered by another participant during an experiment (Study 5). Study 1 tested the basic prediction that power affects attributions for others' favors, in this case real favors that participants recalled from their own lives. Study 2 focused on how power affects attributions for an unsolicited work favor, and how these instrumental attributions drive thankfulness for the favor. Study 3 examined how instrumental attributions for others' favors affect two critical building blocks of relationship development: interpersonal trust and reciprocity. Study 4 tested how income disparities within married couples affect attributions for favors and relationship commitment. Study 5 focused on new acquaintances to establish the critical role of favors in determining when power affects trust. By using a combination of role-based and primed power along with real and imagined favors, both past and present, in the context of professional, romantic, and experimentally created relationships, we seek to triangulate on our central research proposition — power undermines the quality of relationships by creating cynical attributions for others' generous acts.

Study 1: favors and attributions

In Study 1, we tested the prediction that power leads to cynical attributions for favors received. To rule out the possibility that such attributions are simply an accurate and unsurprising response to subordinates who may in fact be acting instrumentally, we manipulated power after participants described a recent favor they had received. As such, the actual intentions behind the favors reported should not differ across high- and neutral-power conditions.

All participants began the experiment by describing the most recent favor someone had done for them. Next, we implicitly activated either a high-power or neutral-power mindset to test whether this shift in mindset would alter attributions for the favor recalled.

Although our theory for why power leads to more instrumental attributions rests on the logic that power-holders' access to resources provides an alternative attribution for others' kind acts, we propose that instrumental attributions are inherently tied to the psychology of power, emerging in response to any favor as long as power has been activated in the mind. This latter hypothesis is consistent with the active-self model of priming effects, which posits that primes influence behavior by bringing concepts associated with the prime into the active self-concept (Wheeler, DeMarree, & Petty, 2007). For example, participants primed with a specific significant other were more likely to express the attitudes and pursue the goals that they do in that relationship (Baldwin & Holmes, 1987; Fitzsimons & Bargh, 2003). Because we predict that those in positions of power tend to be more suspicious of the motives behind the favors they receive, we believe that priming the concept of power will activate the same attributional processes that occur when power is actually possessed (e.g., see Galinsky et al., 2006; Smith & Trope, 2006).

Method

Participants and design

Fifty-six individuals (18 male) ($M_{\text{age}} = 30.85$, $SD = 9.01$) participated in an online experiment with a 2 (power: high vs. neutral) between-participants design³. Participants were recruited via Mechanical Turk and were paid \$0.70 for their participation.

³ Given the online format of our studies, we used the following exclusion criteria where available: duplicate ip addresses, failure on attention check questions, incomplete or inaccurate manipulations (e.g., wrote nothing or wrote about a subordinate when instructed to write about a peer). Two outliers (studentized deleted residuals > |3|, see McClelland, 2000) were removed from Study 2.

Procedure

Favor recall

Participants were first asked to describe the last favor someone had done for them. They indicated what the favor was and how they knew the person who did the favor for them.

Power manipulation

Next, they were randomly assigned to complete either a high-power or a power-neutral prime that involved creating sentences from scrambled words (Smith & Trope, 2006). Participants created eleven four-word sentences. In the high-power condition, eight of the sentences had power words in them (e.g. influence, commands; the remaining three sentences were power-neutral). All eleven sentences in the neutral condition contained power-neutral words.

Instrumental attributions

To measure instrumental attributions for the favor, participants next answered: "To what extent do you believe that this individual did the favor to benefit themselves?" on a 5-point scale: 1 = *not at all*, 5 = *extremely*.

In order to rule out the possibility that favor-givers had systematically more or less power than the participant, participants were also asked how much the favor-giver depended on them and how much they depended on the favor-giver (5 point scale: 1 = *not at all*, 5 = *extremely*). Finally, participants answered a series of demographic questions and an attention check question.

Results and discussion

A one-way analysis of variance (ANOVA) on instrumental attributions supported our prediction⁴. Participants who completed the high-power prime believed the favor was more selfishly motivated than participants who completed the neutral-power prime did, $F(1, 54) = 4.37, p = .041, \eta_p^2 = .08$. See Table 1 for cell means across all of the studies.

There was no effect of condition on the actual power between the participants and their favor-giver, $F < 1$. Thus, the effect cannot be explained by differences in actual power between participants and their favor-giver.

The finding that an implicit power prime activated more selfish attributions for a past favor is particularly noteworthy in that it evoked cynicism when nothing about the situation suggested a cause for interpersonal doubt. Rather, since the favor was recalled before the power prime, it is likely that participants across conditions described an act they believed was "done or granted out of goodwill, rather than from justice or for remuneration" (Dictionary.com, definition for "favor", retrieved 16 August, 2011). Then, when power was primed, instrumental doubt colored the interpretation of this favor and transformed it into what appeared to be a more selfish act.

Further, this study demonstrates that the effect of power on instrumental attributions cannot be driven by demand characteristics. Since participants in this study did not report feeling any more or less powerful than the favor-giver, they were likely not providing the response that they believe power-holders "should" exhibit.

Study 2: thankfulness for favors at work

Study 2 was designed to accomplish three goals. First, we sought to replicate the effect of power on attributions from Study 1. Second, we examined whether the instrumental attributions generated would affect other responses to the favor. We reasoned that instrumental

attributions for another's favor would reduce gratitude for the favor. Third, we wanted to generalize our results beyond implicit primes to other power manipulations. To do so, we manipulated power with a semantic prime, as in Study 1, and through hierarchical role.

Method

Participants and design

Ninety-eight adults with work experience (26 males, $M_{\text{age}} = 39.71$ years, $SD = 13.53$) were randomly assigned to a 2 (power condition: high vs. control) \times 2 (manipulation type: hierarchical role vs. semantic prime) between-participants design. They completed the study online and were entered into a lottery awarding a \$50 gift certificate to a major online retailer.

Procedure

Power manipulations

In the *hierarchical role* manipulation, participants wrote about either a subordinate (*high-power condition*) or a peer (*control condition*) with whom they had actual work experience (for details see Gruenfeld et al., 2008). Then, they were asked to imagine that their co-worker had recently offered to help with a menial task (i.e., proof-reading for typos). As a result of this favor, the participant was told to imagine that he or she had been able to leave work on time.

Participants in the *semantic-priming* manipulation completed a sixteen-item sentence construction task similar to Study 1. In the *high-power condition*, eight of the items were related to power. In the *control condition*, all the items were power-neutral. They were then asked to write about a *peer* they had worked with in the past, and to imagine their co-worker had performed the favor described above.

Dependent measures

Our first question measured *instrumental attributions*: "To what extent do you believe that your co-worker did the favor so that you would feel compelled to repay it in the future?" Two questions then measured participants' *thankfulness for the favor*: "How thankful are you for the favor?" and "How appreciative are you of the favor?" ($r = .86, p < .001$). All responses were reported on five-point scales (1 = *not at all*, 5 = *extremely*).

Results and discussion

Instrumental attributions

A Power Condition \times Manipulation Type ANOVA on attributions revealed only a main effect of power condition, $F(1, 94) = 13.46, p < .001, \eta_p^2 = .13$. Participants in the high-power condition were more likely to attribute the favor to selfish motives compared to those in the control condition. Neither the interaction nor the main effect of manipulation type reached significance, $F_s < 1$. In addition, there was a significant effect of power for both the role-based, $F(1, 94) = 9.80, p = .002, \eta_p^2 = .09$, and the semantic-prime power manipulations, $F(1, 94) = 4.16, p = .044, \eta_p^2 = .04$.

Thankfulness

A Power Condition \times Manipulation Type ANOVA on the thankfulness composite variable revealed only a main effect of power condition, $F(1, 94) = 18.58, p < .001, \eta_p^2 = .17$, with participants in the high-power condition reporting less thankfulness than those in the control condition. Neither the interaction nor the main effect of manipulation type reached significance, $F_s < 1$. Importantly, there was a significant effect

⁴ Across studies, we looked at whether sex interacted with any of our independent variables to predict our dependent measures. None of these effects reached significance.

Table 1
Cell means across all studies (standard deviation in parentheses).

Power manipulation	Study 1	Study 2		Study 3	Study 4	Study 5	
	Semantic prime	Hierarchical role	Semantic prime	Hierarchical role	Relative income	Hierarchical role	Hierarchical role
Favor: yes vs. no	Yes	Yes	Yes	Yes	Yes	No	Yes
<i>Attributions to selfish intentions</i>							
High power	1.81 (1.06)	2.88 (1.15)	2.83 (1.27)	2.52 (.63)	3.11 (0.48)		
Control/Equal power	1.33 (.61)	1.83 (1.01)	2.17 (1.05)	1.69 (.78)	2.67 (0.56)		
Low power					2.16 (0.75)		
<i>Thankfulness</i>							
High power		4.28 (.55)	4.26 (.74)				
Control/equal power		4.74 (.44)	4.77 (.42)				
<i>Desire to reciprocate</i>							
High power				3.76 (.83)			
Equal power				4.22 (.92)			
<i>Trust</i>							
High power				3.84 (.87)			
Equal power				4.24 (.72)			
<i>Commitment to relationship</i>							
High power					3.97 (0.45)		
Equal power					4.49 (0.30)		
Low power					4.52 (0.73)		
<i>Trust attributes</i>							
High power						3.51 (.69)	3.74 (.75)
Equal power						3.32 (.71)	4.12 (.63)

of power for both the role-based, $F(1, 94) = 8.12, p = .005, \eta_p^2 = .08$, and the semantic-prime manipulations, $F(1, 94) = 10.60, p = .002, \eta_p^2 = .10$.

To test whether attributions for the favor mediated the relationship between power and thankfulness, we collapsed across manipulation type and regressed thankfulness onto power and attributions for the favor. The relationship between attributions for the favor and thankfulness was significant, $\beta = -.38, t(95) = -4.11, p < .001$, while the effect of power on thankfulness dropped in significance, $\beta = -.27, t(95) = -2.94, p = .004$. To test whether the path through the mediator was significant we constructed a 95% confidence interval (CI) for the indirect effect using bootstrapping procedures (Preacher, Rucker, & Hayes, 2007). Zero fell outside of the CI (-.324 to -.060), demonstrating a significant indirect effect of attributions on thankfulness.

Power triggered instrumental attributions for the generous acts of others, which reduced thankfulness for those acts. Further, this result was obtained both when power was manipulated through roles and when it was primed. As in Study 1, even when the favor was produced by a peer and there was no logical basis for assuming greater instrumentality, individuals primed with the concept of power were more cynical about and less thankful for a favor.

Study 3: power undermines reciprocity and interpersonal trust

Study 3 was designed to replicate the effect of power on instrumental attributions and explore how it would affect processes critical to relationship development. Reciprocity, the social norm that people should do unto others as others have done to them, has been identified as a key component of relationships, and even of a stable society, because it creates social equilibrium and cohesion (Cicero, as cited in Gouldner, 1960; Simmel, 1950). Because thankfulness, measured in Study 2, is a strong predictor of reciprocity (Cialdini, 1984; Eisenberger, Huntington, Hutchison, & Sowa, 1986), we hypothesized that high-power individuals would feel less desire to reciprocate in response to a favor than equal-power participants. Further, because trust is enhanced when it appears that others are driven by benevolent rather than self-interested motives (Berscheid & Reis, 1998; Larzelere & Huston, 1980; Reis & Shaver, 1988), we predicted that

power would undermine their interpersonal trust, a core ingredient of social relationships (Wieselquist et al., 1999).

Method

Participants and design

Sixty-six adults (22 males, $M_{age} = 39.44$ years, $SD = 11.55$) were randomly assigned to a high-power or equal-power condition in an online study. As compensation, they were entered into a lottery awarding a \$100 gift certificate.

Procedure

Power manipulation

We used the same hierarchical role manipulation described in Study 2.

Dependent variables

Two items measured *instrumental attributions*: “To what extent do you believe that your co-worker did the favor to help you?” and “To what extent do you believe that your co-worker did the favor to benefit themselves” ($r = -.41, p = .001$, first item reverse-coded). *Desire to reciprocate* was measured with one item: “To what extent do you want to reciprocate the favor?” *Trust* was measured with two items: “To what extent do you trust your co-worker?” and “To what extent do you believe your co-worker has your best interests at heart?” ($r = .74, p < .001$). All responses were reported on five-point scales (1 = not at all and 5 = extremely).

Results and discussion

Instrumental attributions

As predicted, participants in the high-power condition were more likely to generate instrumental attributions for the favor compared to those in the equal-power condition, $F(1, 64) = 21.35, p < .001, \eta_p^2 = .25$.

Reciprocity

High-power participants reported less desire to reciprocate the favor than equal-power participants did, $F(1, 64) = 4.39$, $p = .040$, $\eta_p^2 = .06$. We predicted that the desire to reciprocate would be mediated by attributions for the favor. In a simultaneous regression, attributions predicted desire to reciprocate, $\beta = -.55$, $t(63) = -4.45$, $p < .001$, while the effect of power dropped to non-significance, $\beta = .02$, $t(63) = 0.16$, $p = .874$. Bootstrapping revealed a 95% CI ($-.961$ to $-.184$) that did not include zero, demonstrating a significant indirect effect of attributions on desire to reciprocate.

Trust

High-power participants reported trusting their co-worker less than equal-power participants did, $F(1, 64) = 4.14$, $p = .046$, $\eta_p^2 = .06$. We conducted a simultaneous regression to test for mediation by attributions. Attributions predicted trust, $\beta = -.68$, $t(63) = -6.05$, $p < .001$, while the effect of power on trust dropped to non-significance, $\beta = .09$, $t(63) = .83$, $p = .411$. Bootstrapping procedures revealed a 95% CI (-1.016 to $-.259$) that did not include zero, demonstrating a significant indirect effect of attributions on trust.

Study 3 provides additional support for our hypothesis that power leads to more instrumental attributions for a seemingly generous act and demonstrates that these power-induced instrumental attributions diminish the desire to reciprocate and the tendency to trust the favor-giver.

Study 4: power, marriage and commitment

Study 4 was designed to conceptually replicate the findings of the previous studies in a different relationship context – marriage – and to examine the effect of power on commitment to the relationship. Since one might assume, or at least hope, that work relationships are more strategic than marital relationships, we thought this context might provide a more conservative test of our hypotheses. We operationalized power differences in terms of income disparity, and examined attributions for spontaneous favors performed by one's spouse as well as overall commitment to the marriage.

The importance of income disparity as a source of power within marital relationships is well documented (Blood & Wolfe, 1960; Pahl, 1983; Vogler, Lyonette, & Wiggins, 2008). Although income is certainly not the only source of power in a relationship, spouses with the larger income often retain hidden "rights" of ownership to financial resources, even when income is pooled and resources appear to be equally shared (Burgoyne, 2008). We predicted that the primary earner and thus the more powerful spouse would generate more instrumental attributions when asked to imagine that their partner had spontaneously performed a generous act.

Selfish or instrumental attributions for a partner's behavior are negatively associated with the development of successful close relationships (Larzelere & Huston, 1980). Study 3 provided support for this notion in the context of trust in work relationships. But this association becomes even more important in close relationships, which involve commitment, defined as "... a long term orientation toward a relationship ... including feelings of personal attachment" (Wieselquist et al., 1999, p. 943). Because commitment makes an individual vulnerable to and dependent on the other, relationship partners rely on beliefs about their partner's motives and trustworthiness as a gauge of how much to commit. Thus, we predicted that, compared to individuals who earn the same or less than their spouses, those who reported earning more than their spouses would also report being less committed to the marriage after having considered their partner's motives for a favor.

Method

Participants

One hundred and twenty-three married adults (63 males, $M_{age} = 34.50$ years, $SD = 5.73$) were recruited from an online mailing list and paid \$2 to complete a survey.

Procedure

Participants first responded to a screening page that verified their marital status. Non-married participants were told they did not meet the study criteria.

Favor context

Participants were first asked to describe their least favorite household chore and were then told to "Imagine that as a favor to you, your spouse did your least favorite chore for you this week". For the second favor, participants were asked to imagine that their spouse had bought them tickets to an event that the respondent wished to attend.

Instrumental attributions

After imagining each favor, participants answered the two instrumental attribution items from Study 3. We combined these four items to create one composite measure of instrumental attributions ($\alpha = .67$).

Relationship commitment

Participants then responded to 7 items ($\alpha = .69$) measuring commitment to the marital relationship (e.g., "I am committed to maintaining my relationship with my partner," "It is likely that I will date someone other than my partner in the next year (r)," Rusbult, Martz, & Agnew, 1998). All responses were reported on five-point scales (1 = do not agree at all, 5 = agree strongly).

Power measure

After responding to the attribution and commitment items, participants reported the extent to which they agreed with the following statement: "My spouse is more dependent on me than I am on him/her" (1 = disagree strongly, 7 = agree strongly). Next, participants identified the primary income earner in the household (1 = I am, 2 = My spouse is, 3 = We earn approximately the same income) and reported whether either partner was a full-time student. Participants or partners with student status were removed from the dataset, since this would lead to temporary income disparities. Finally, participants provided basic demographic information.

Results and discussion⁵

Manipulation check

Because we used income disparity as an operationalization of power, we expected that primary income earners would report their partner being more dependent than non-primary income earners would (Emerson, 1962). A one-way ANOVA revealed a significant effect of income disparity on others' dependence, $F(2, 112) = 19.66$, $p < .001$, $\eta_p^2 = .26$. Specifically, participants

⁵ It is interesting to note that men, who tend to have more power than women in many contexts, were more likely to attribute the favors to selfish motives ($M_{men} = 2.95$, $SD = .47$; $M_{women} = 2.57$, $SD = .87$), $F(1, 113) = 8.42$, $p = .004$, $\eta_p^2 = .07$ and reported less commitment to the relationship ($M_{men} = 4.04$, $SD = .55$; $M_{women} = 4.38$, $SD = .59$), $F(1, 113) = 10.27$, $p = .002$, $\eta_p^2 = .08$. They were also more likely to report primary earner status (78% of male vs. 31% of female respondents). Controlling for sex, however, power remained a significant predictor of attributions, $\beta = .62$, $t(112) = 6.92$, $p < .001$, and commitment, $\beta = -.39$, $t(112) = -3.90$, $p < .001$.

who reported earning more than their spouse ($M=5.55$, $SD=1.53$) reported their spouse as being more dependent than equal and secondary income earners did ($M=4.00$, $SD=1.55$), $t(112)=4.73$, $p<.001$, $d=1.02$. Further, participants who earned the same amount as their spouse ($M=4.83$, $SD=1.10$) reported their spouse as being more dependent than secondary income earners did ($M=3.55$, $SD=1.58$), $t(112)=2.95$, $p=.004$, $d=0.91$.

Instrumental attributions

Consistent with our predictions, income disparity had a significant effect on instrumental attributions, $F(2, 112)=29.52$, $p<.001$, $\eta_p^2=.35$. Participants who earned more attributed greater instrumental intentions to their spouse's generous acts compared to those who earned the same or less than their spouse, $t(112)=6.23$, $p<.001$, $d=1.30$. Also, participants who earned the same as their spouse were more likely to ascribe instrumental intentions onto the favors than lower-earning spouses were, $t(112)=2.99$, $p=.003$, $d=0.75$.

Commitment

Also as predicted, income disparity significantly predicted commitment, $F(2, 112)=14.99$, $p<.001$, $\eta_p^2=.21$. Participants who earned more were less committed than participants who earned the same or less than their spouse, $t(112)=-5.29$, $p<.001$, $d=-1.03$. Interestingly, there was no difference in commitment between participants who earned the same as their spouse and those who earned less than their spouse, $t<1$.⁶

Mediation test

To test if power reduced commitment by producing more instrumental attributions for spouses' generous acts, we regressed responses to the commitment scale onto income disparity (1 = lower earner, 2 = equal earner, 3 = higher earner) and attributions for the favors. The relationship between income disparity and commitment dropped to non-significance, $\beta=-.17$, $t(112)=-1.75$, $p=.084$, while the relationship between attributions and commitment remained significant, $\beta=-.45$, $t(112)=-4.73$, $p<.001$. Bootstrapping procedures revealed a 95% CI (-.269 to -.110) that did not include zero, demonstrating a significant indirect effect of attributions on relationship commitment.

Study 4 demonstrated that the corrupting effect of power on relationships extends to marriages, with those partners in a more powerful financial position ascribing more instrumental motives to their partners and reporting less commitment. We are quick to note that there are mixed results regarding the effect of income disparity on divorce rates (Cohn & Fry, 2010; Jalovaara, 2003; Rogers, 2004; White & Rogers, 2000). Thus, while power-holders in a marriage may report feeling less committed than their lower-power counterparts, the extent to which our results imply anything about marital outcomes is uncertain and should therefore be interpreted with caution.

Study 5: power and the unique role of favors in relationship corruption

Studies 1 through 4 demonstrated that, in the context of a favor, power hampers relationship development in a variety of ways – reduced

thankfulness, reciprocity, trust and commitment – by fostering more cynical beliefs about the motivation behind the favor. However, without demonstrating the effect of power on relationship development in the absence of a favor, we are left with the possibility that a relationship overture, such as a favor, is not necessary to activate or even magnify the tendency for power to corrupt relationships. Rather, power-holders might respond in the same way across situations, being generally cynical or paranoid (Kramer, 1994).

On the other hand, if power stymies relationship development only after a favor, but not in the absence of a favor, then this would suggest that power-holders are particularly likely to distance themselves from the very people that seek to develop a closer relationship with them. This would support Morgenthau's (1962) argument that it is specifically expressions of love that lead power-holders to distrust others. To test this, Study 5 orthogonally manipulated power and the presence vs. absence of a favor, and then measured to what extent participants believed their co-worker possessed attributes that inspire trust: kindness, trustworthiness and generosity.

An additional contribution of Study 5 is to test our predictions in the context of a new relationship. So far we have tested the possibility that power corrupts the relationship-building process in the context of existing relationships, such as work partners and spouses. However, to the extent that power does stymie relationship building, it is important to observe this phenomenon not only in existing relationships, but also in the incipient moments of a relationship, when the first acts of kindness are often extended.

A final contribution of Study 5 was to observe how power affects relationship-building in response to a real favor received by the participant during the experiment. While Study 1 had participants recall a real past favor, and Studies 2–4 asked participants to imagine a favor had occurred in an ongoing relationship, participants in Study 5 received a gift of real money from an ostensible co-worker during the study, providing a new operationalization of our proposed dynamic.

Method

Participants and design

One-hundred and thirty one adults (41 males, 77 females, 13 unidentified, $M_{age}=32.46$ years, $SD=12.05$) completed an on-line study run on Amazon.com's Mechanical Turk website. The experiment was a 2 (power: high vs. equal) \times 2 (favor: yes vs. no) between-participants design. As compensation, they were paid \$0.80 (in the no-favor condition) or \$0.90 (in the favor condition).

Procedure

Participants were asked to imagine that they were working for a company that develops creative ideas to solve their clients' problems and that they would be assigned a role on the team.

Power manipulation

Participants were randomly assigned to either a manager (*high-power*) or teammate (*equal-power*) role. In the *high-power condition*, participants were told that they would be supervising a subordinate, whose work they would be evaluating at the end of the task. Further, they were informed that this evaluation might affect the subordinate's compensation and to respond carefully. In the *equal-power condition*, they were told that they would be working with one other individual and that they would answer questions about the experience after the task. Participants across conditions were told that the person they were working with was a real participant, also online. To boost the realism of this story, participants were asked to wait a few seconds while this participant was located and connected to them. A commonly-used "wait" icon appeared on the screen during this time.

⁶ The fact there was a mean difference between the low- and equal-power conditions for the manipulation check and attributions, but not for commitment, may reflect the ambivalence of sharing power with one's spouse. Spouses with equal income are often highly interdependent, such that each depends on the other to maintain their lifestyle. This mutual dependence may explain similar levels of commitment across equal and secondary income earners.

Next, participants were introduced to the project plan for the task, which said that they would read over their client's problem, brainstorm ideas for as long as they wished, request to see their subordinate's [teammate's] ideas when they were ready, submit a final idea to the client, and finally evaluate their subordinate's performance [answer questions about the task]. The problem was adapted from Johnson and Johnson (2009) and described a buyer (i.e., the client) who had purchased 20,000 pipe cleaners for a wholesaler that no longer needed them because his warehouse had burned down. The client had to figure out what to do with the 20,000 pipe cleaners. An image of pipe cleaners was included below this description. When participants desired, they could click to see their subordinate's ideas, which was a list of ten suggestions including "Use to make crafts (flowers, fake glasses, hearts for Valentine's Day, etc.)" and "Use to clean your cell phone screen". Once the participants felt that they had determined a single optimal solution, they submitted it to the client.

Favor manipulation

On the next page of the study, all participants read the following:

We recruit participants from many pools to take these studies. Sometimes we offer different amounts of compensation to different pools. The subordinate you are working with today is earning \$1.00 for the experiment, while you are earning \$0.80.

Participants randomly assigned to the *no-favor* condition then continued to the next page with no further text.

Participants assigned to the *favor* condition read the following before continuing to the next page:

While you were submitting to the client, your subordinate [teammate] was given the opportunity to either keep his/her payment or to transfer some of his/her payment to you. Your subordinate [teammate] has chosen to transfer \$0.10 to you so that you both earn \$0.90.⁷

To boost realism, participants then evaluated their subordinate's [teammate's] performance by answering how creative and realistic his/her ideas were and how hard he/she worked, given the time limitations (5-point scale, 1 = *not at all*, 5 = *extremely*). These items were combined to form a composite measure of performance evaluation ($\alpha = .80$). We had no a priori predictions regarding how the power and favor conditions would affect performance evaluations, since we included these items only to increase the realism of our cover story and our power manipulation. A 2 (power: high vs. equal) \times 2 (favor: yes vs. no) ANOVA on the composite performance evaluation revealed no significant effects.

Finally, participants responded to the key dependent measures: the extent to which their subordinate [teammate] displayed characteristics that inspire trust. Specifically, they reported how kind, trustworthy and generous their subordinate [teammate] is (5-point scale, 1 = *not at all*, 5 = *extremely*). These items were combined to form a composite trust attributes rating of the other individual ($\alpha = .90$).

Results and discussion

We predicted an interaction between the power and favor conditions, such that power reduces trust only after a favor, and not in the

absence of a favor. A 2 (power: high vs. equal) \times 2 (favor: yes vs. no) ANOVA on the composite trust attributes revealed a significant main effect of favor condition, $F(1, 127) = 17.74, p < .001, \eta_p^2 = .12$, and a significant interaction between power and favor condition, $F(1, 127) = 5.46, p = .021, \eta_p^2 = .04$. Follow-up contrasts revealed that when the co-worker performed a favor, those in the high-power condition believed this individual was less trustworthy than participants in the equal-power condition did, $F(1, 127) = 4.62, p = .033, \eta_p^2 = .04$. However, when the co-worker did not perform a favor, there was no difference in ratings of his/her trustworthiness as a function of power condition, $F(1, 127) = 1.25, p = .265, \eta_p^2 = .01$.

We also decomposed the interaction by looking at the effect of favor condition within each level of power. Consistent with prior research, participants reported that their teammate inspired greater trust when they performed a favor compared to when they did not perform a favor – but only in the equal-power condition, $F(1, 127) = 22.75, p < .001, \eta_p^2 = .15$. Favor condition did not significantly affect high-power participants' perception of their subordinate's trust attributes, $F(1, 127) = 1.66, p = .199, \eta_p^2 = .01$.

These findings suggest that whereas a favor is an effective relationship-building tool in equal-power relationships, it is not effective when the recipient is more powerful than the giver. In addition, Study 5 shows that powerful people do not report more cynical or paranoid accounts of others' trustworthiness in general. Perversely, this effect only appeared to emerge after the power-holder had received a favor.

General discussion

The experience of power is enviable because it liberates people from a host of social concerns (see Fiske, 2010 for a review). Yet salient anecdotes from visible celebrities suggest that power can be a curse. In commenting on his experiences with women, Leonardo DiCaprio said: "I had better success meeting girls before Titanic... there wasn't a perception of her talking to me for only one reason" (Cavanagh, 2010). Child actor Gary Coleman left the following chilling instructions in his will: "Plan a wake for me conducted by those who have had no financial ties to me and can look each other in the eyes and say they really cared personally for Gary Coleman" (Lee, 2010). Despite the relative freedom from social concerns described in recent research on power, these quotations suggest that power may be inextricably tied to anxieties about the meaning of social interactions and others' intentions, prompting the question: do they love me or do they merely love my celebrity? While this phenomenon could be considered simply a "celebrity's dilemma", faced only by the rich and famous, we believe it speaks to a larger dynamic that springs from the psychological consequences of power.

The results reported here provide evidence for the paradox described by Morgenthau (1962) almost fifty years ago: people seek power because they want to be embraced by others but, once in power, the affection and connection that are offered are tainted by ambiguities surrounding their meaning. Power-holders cannot escape the possibility that acts of kindness directed at one's person are actually directed at one's power. While this dilemma is widely reported among celebrities, adding face validity to Morgenthau's claims, and seems consistent with the observation that it feels lonely at the top (e.g., Lee & Tiedens, 2001), our research represents the first empirical test of his hypothesis that we know of.

Across five studies, we found that power tainted power-holders' attributions for others' kind acts. Personal favors recalled by participants, favors done by colleagues at work, and even favors offered by a spouse were cynically attributed to more instrumental motives when the recipient was powerful. Our results show that the effect can be a purely psychological consequence of power: even when power was semantically primed, individuals tended to doubt the favor-givers' intentions. These more cynical attributions

⁷ While \$0.10 may seem insignificant, the authors' experience suggests that this is a meaningful sum for participants on Mechanical Turk since many tasks available are very short and payment is typically linearly pegged to \$6 per hour (e.g., \$0.80 for an 8-minute study). Thus an 8-minute task that pays 12.5% more than the average rate is significantly more attractive. Indeed, studies that are posted at greater than the \$6 per hour rate fill up significantly faster than those at or below this rate.

ultimately hindered the ability of power-holders to engage in psychologically processes that help develop close relationships: the powerful experienced less thankfulness, less desire to reciprocate, less trust, and, perhaps most noteworthy of all, less commitment to one's spouse. Further, Study 5 demonstrated that the corrupting effect of power on relationships is specifically triggered by the very acts that typically lead to greater intimacy – favors. In the absence of a favor, power did not affect variables predictive of relationship building.

At first blush, one could be concerned that our results are attributable to experimental demand. That is, maybe individuals with power respond to favors with cynicism because they think that, as savvy power-holders, this is how the experimenter expects them to behave. However, the fact that our effect emerged in two studies as a result of a supraliminal power prime inspires confidence that our proposed dynamic is not simply an artifact of demand characteristics. Participants in the priming conditions did not actually have power over those that provided the favors, and therefore are not likely to be providing the responses that they believe power-holders should provide. Furthermore, the marriage study measured power after participants had reported their attributions for the imagined favors.

Theoretical contributions

We believe this research provides several important contributions. First, it provides a new perspective on the metamorphic effects of power. Although past work has typically focused on the amount of attention paid to subordinates and others (Fiske, 1993; Galinsky et al., 2006; Overbeck & Park, 2001), the current research demonstrates that power can also affect interpersonal connections because it changes the basic meaning of others' behavior.

The current research also expands our understanding of the mechanisms that impede relationship closeness among the powerful. Although many reasons have been cited for the experience of "loneliness at the top" (Lee & Tiedens, 2001), here we provide a causal model to show that one key contributing factor is power-holders' cynical interpretation of others' kind acts, which inhibit relationship-building responses. We do not mean to imply that power-holders are wrong to doubt the motives of those around them. The powerful may indeed be more likely to be targets of instrumental favors, and since people tend to believe that the motives behind acts of ingratiation are pure (Vonk, 2002), some skepticism may be warranted and functional. Rather, we simply note that power carries its own cost and narrows the gateways to true closeness.

Future directions

We see a number of future directions for the current research. Although our studies demonstrate that power leads to more cynical attributions for others' generous acts, we do not believe this will always be the case. Individuals who are prone to see the best in and to work for the benefit of others, such as individuals who score high on agreeableness (McCrae & Costa, 1987) or empathy (Davis, 1983), might be more likely to see others' generous acts as driven by altruistic instead of instrumental motives when in power. Further, since power increases goal pursuit, the powerful may be more likely to behave in ways that nurture relationships when subordinates are particularly instrumental in achieving a personal goal. Consistent with this idea, power-holders often attempt to build connections with useful others (Gruenfeld et al., 2008). Future research could test the moderating effect of such situational and dispositional variables.

Another interesting area for future research might be to further explore the unique role of favors in driving this process. In Study 5, we showed that high-power individuals are less trusting than others after a favor, but not in the absence of a favor. We did not, however, test the effect of power after a favor versus after other proactive behaviors. Our theory specifies that the powerful become more cynical

when their own power creates ambiguity about the drivers of others' actions. We propose that the cynicism arises when another's behavior could be driven by one set of motivations, such as altruism, but could also be motivated by a second, inconsistent set of motivations linked to the recipient's power, such as self-interest. Therefore, we would predict that proactive behaviors that are part of an employee's job description would be less likely to lead to greater cynicism in power-holders because the attribution is clear. A study that tested and found support for this prediction would provide yet further evidence that power corrupts relationships in the very moment in which they have the most potential to grow.

Conclusion

Power can be isolating. Across five studies, we provide evidence to suggest that part of this isolation can be self-made. By virtue of being in a position of power, the attributions for the kind acts of others become ambiguous: is this kindness to benefit me, or is it to gain access to my power? Without this ambiguity, kind acts produce benevolent attributions that inspire trust, encourage reciprocity and build stronger relationships. With this ambiguity, a vicious cycle ensues: the cynical attributions for others' kind acts ultimately taint the gestures, tarnish the response, and diminish the potential for true intimacy.

References

- Ames, D. R., Flynn, F. J., & Weber, E. U. (2004). It's the thought that counts: On perceiving how helpers decide to lend a hand. *Personality and Social Psychology Bulletin*, 30, 461–474.
- Baldwin, M. W., & Holmes, J. G. (1987). Salient private audiences and awareness of the self. *Journal of Personality and Social Psychology*, 52, 1087–1098.
- Berscheid, E., & Reis, H. T. (1998). Attraction and close relationships. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (pp. 193–281). (4 ed.). New York: McGraw-Hill.
- Blood, R. O., & Wolfe, D. M. (1960). *Husbands and wives*. New York: Macmillan.
- Burgoyne, C. (2008). Introduction: Special issue on the household economy. *Journal of Socio-Economics*, 37, 455–457.
- Cavanagh, K. (2010). Leonardo DiCaprio says he 'had better success meeting girls' before hitting it big with 'Titanic'. *NYDailyNews.com*. Retrieved on August 27, 2010.
- Cialdini, R. B. (1984). *Influence*. New York: William Morrow and Company.
- Cohn, D., & Fry, R. (2010). *Women, men and the new economics of marriage*. Pew Research Center Publications pewsocialtrends.org
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44, 113–126.
- Ebenbach, D. H., & Keltner, D. (1998). Power, emotion and judgmental accuracy in social conflict: Motivating the cognitive miser. *Basic and Applied Social Psychology*, 20, 7–21.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *The Journal of Applied Psychology*, 71, 500–507.
- Emerson, R. M. (1962). Power-dependence relations. *American Sociological Review*, 27, 31–40.
- Fiske, S. T. (1993). Controlling other people: The impact of power on stereotyping. *The American Psychologist*, 48, 621–628.
- Fiske, S. T. (2010). *Social beings: Core motives in social psychology*. New York: Wiley.
- Fitzsimons, G. M., & Bargh, J. A. (2003). Thinking of you: Nonconscious pursuit of interpersonal goals associated with relationship partners. *Journal of Personality and Social Psychology*, 84, 148–164.
- Galinsky, A. D., Magee, J. C., Inesi, M. E., & Gruenfeld, D. H. (2006). Power and perspectives not taken. *Psychological Science*, 17, 1068–1074.
- Goodwin, S. A., Gubin, A., Fiske, S. T., & Yzerbyt, V. Y. (2000). Power can bias impression processes: Stereotyping subordinates by default and by design. *Group Processes and Intergroup Relations*, 3, 227–256.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25, 161–178.
- Greenberg, M. S., & Frisch, D. M. (1973). Effect of intentionality on willingness to reciprocate a favor. *Journal of Experimental Social Psychology*, 8, 99–111.
- Gruenfeld, D. H., Inesi, M. E., Magee, J. C., & Galinsky, A. D. (2008). Power and the objectification of social targets. *Journal of Personality and Social Psychology*, 95, 111–127.
- Guinote, A. (2008). Power and affordances: When the situation has more power over powerful than powerless individuals. *Journal of Personality and Social Psychology*, 95, 237–252.
- Jalovaara, M. (2003). The joint effects of marriage partners' socioeconomic positions on the risk of divorce. *Demograph*, 40, 67–81.
- Johnson, D. W., & Johnson, F. P. (2009). *Joining together: Group theory and group skills*. Upper Saddle River, NJ: Pearson.
- Kelley, H. H. (1972). Causal schemata and the attribution process. In E. E. Jones, D. E. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valins, & B. Weiner (Eds.), *Attribution: Perceiving the causes of behavior*. Morristown, N. J.: General Learning Press.

- Keltner, D. J., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, 110, 265–284.
- Kipnis, D. (1972). Does power corrupt? *Journal of Personality and Social Psychology*, 24, 33–41.
- Kipnis, D., Castell, P. J., Gergen, M., & Mauch, D. (1976). Metamorphic effects of power. *The Journal of Applied Psychology*, 61, 127–135.
- Kramer, R. M. (1994). The sinister attribution error: Paranoid cognition and collective distrust in organizations. *Motivation and Emotion*, 18, 199–230.
- Kraus, M. W., Côté, S., & Keltner, D. (2010). Social class, contextualism, and empathic accuracy. *Psychological Science*, 21, 1716–1723.
- Lammers, J., Galinsky, A. D., Gordijn, E. H., & Otten, S. (in press). Power increases social distance. *Social Psychological and Personality Science*.
- Larzelere, R. E., & Huston, T. L. (1980). The dyadic trust scale: Toward understanding interpersonal trust in close relationships. *Journal of Marriage and Family*, 42, 595–604.
- Lee, K. (2010). *Gary Coleman leaves bittersweet instructions for funeral*. People.com Retrieved on August 27, 2010.
- Lee, F., & Tiedens, L. Z. (2001). Is it lonely at the top? The independence and interdependence of power holders. *Research in Organizational Behavior*, 23, 43–91.
- Malhotra, D., & Murnighan, J. K. (2002). The effects of contracts on interpersonal trust. *Administrative Science Quarterly*, 47, 534–559.
- McClelland, G. H. (2000). Nasty data: Unruly, ill-mannered observations can ruin your analysis. In H. T. Reis, & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology*. Cambridge, UK: Cambridge University Press.
- McCrae, R., & Costa, P. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52, 81–90.
- Morgenthau, H. J. (1962). Love and power. *Commentary*, 33, 247–251.
- Overbeck, J. R., & Park, B. (2001). When power does not corrupt: Superior individuation processes among powerful perceivers. *Journal of Personality and Social Psychology*, 81, 549–565.
- Pahl, J. (1983). The allocation of money and the structuring of inequality within marriage. *Sociological Review*, 237–262 May.
- Piff, P. K., Kraus, M. W., Côté, S., Cheng, B. H., & Keltner, D. (2010). Having less, giving more: The influence of social class on prosocial behavior. *Journal of Personality and Social Psychology*, 99, 771–784.
- Preacher, K. J., Rucker, D. D., & Hayes, A. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42, 185–227.
- Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. In S. W. Duck (Ed.), *Handbook of personal relations*. Chichester, England: Wiley.
- Rempel, J. K., Holmes, J. G., & Zanna, M. P. (1985). Trust in close relationships. *Journal of Personality and Social Psychology*, 49, 95–112.
- Rios, K., Gruenfeld, D. H., & Fast, N. (2011). *Discomfort with power: When psychological distance meets the need to belong*. Unpublished manuscript.
- Rogers, S. J. (2004). Dollars, dependency, and divorce: Four perspectives on the role of wives' income. *Journal of Marriage and Family*, 66, 59–74.
- Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). The Investment Scale Model: Measuring commitment level, satisfaction level, quality of alternatives, and investment size. *Personal Relationships*, 5, 357–391.
- Schopler, J., & Thompson, V. D. (1968). Role of attribution processes in mediating amount of reciprocity for a favor. *Journal of Personality and Social Psychology*, 10, 243–250.
- Simmel, G. (1950). *The sociology of Georg Simmel* (K. H. Wolff, Trans.). New York: Free Press.
- Smith, P. K., & Trope, Y. (2006). You focus on the forest when you're in charge of the trees: Power priming and abstract information processing. *Journal of Personality and Social Psychology*, 90, 578–596.
- Snodgrass, S. S. (1985). Women's intuition: The effect of subordinate role on interpersonal sensitivity. *Journal of Personality and Social Psychology*, 49, 145–155.
- Snodgrass, S. S. (1992). Further effects of role versus gender on interpersonal sensitivity. *Journal of Personality and Social Psychology*, 62, 154–158.
- Van Kleef, G. A., Oveis, C., Van der Löwe, I., LuoKogan, A., Goetz, J., & Keltner, D. (2008). Power, distress, and compassion: Turning a blind eye to the suffering of others. *Psychological Science*, 19, 1315–1322.
- Vogler, C., Lyonette, C., & Wiggins, R. D. (2008). Money, power and spending decisions in intimate relationships. *The Sociological Review*, 56, 117–143.
- Vonk, R. (2002). Self-serving interpretations of flattery: Why ingratiation works. *Journal of Personality and Social Psychology*, 82, 515–526.
- Wheeler, S. C., DeMarree, K. G., & Petty, R. E. (2007). Understanding the role of the self in prime-to-behavior effects: The active-self account. *Personality and Social Psychology Review*, 11, 234–261.
- White, L., & Rogers, S. J. (2000). Economic circumstances and family outcomes: A review of the 1990s. *Journal of Marriage and Family*, 62(1035–1051).
- Wieselquist, J., Rusbult, C. E., Foster, C. A., & Agnew, C. R. (1999). Commitment, pro-relationship behavior, and trust in close relationships. *Journal of Personality and Social Psychology*, 77, 942–966.