

The Dual Role of Power in Resisting Social Influence

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Abstract:

This article maintains that power enhances consumers’ ability to resist social influence but produces different resistance outcomes, depending on the level of certainty with which consumers hold their own attitudes. When attitude certainty is high, empowered consumers resist social influence by discounting others’ opinions. When attitude certainty is low, empowered consumers intentionally diverge from others’ opinions to signal their independence. Data from the first two experiments provide consistent support for the dual impact of power. The last two experiments examine the processes leading to the reactant response. Experiment 3 finds that the experience of uncertainty weakens empowered consumers’ confidence in their sense of power, leading them to perceive others’ unsolicited opinions as a threat to their autonomy, which then triggers the reactant response. Finally, consistent with a self-presentation interpretation of reactance, experiment 4 finds that power leads to reactance when evaluations are public but not when they are private.

Keywords: social influence | consumer attitudes | empowered consumers

Article:

One of the least contentious ideas in consumer research is that attitudes toward products, services, retailers, and consumption in general can be influenced by other people's opinions (Bearden and Etzel 1982; Cialdini and Goldstein 2004; Goldstein, Cialdini, and Griskevicius 2008). Nonetheless, recent studies suggest that power may play an important role in determining how individuals respond to social influence (Briñol et al. 2007; Galinsky et al. 2008). This line of research maintains that power increases consumers’ reliance on their own attitudes and leads to evaluations that are largely unaffected by the opinions of others. According to this view, empowered consumers either pay no attention to other people's opinions or dismiss them entirely when evaluating a product.

The present research concurs that power generally enhances consumers' ability to resist social influence. However, it posits that power produces different resistance outcomes, depending on the degree of certainty or sense of conviction with which consumers hold their attitudes. More specifically, when empowered consumers are certain of their attitudes toward the evaluation object, they resist social influence by discounting the opinions of others, as described in prior research. However, when the evaluation object elicits less certain attitudes, empowered consumers may deliberately express opinions that diverge from those expressed by others, even if such opinions are inconsistent with those privately held. This is because the subjective experience of uncertainty weakens empowered consumers' confidence in their sense of power, triggering a chain of defensive processes that culminate in a reactant response. Furthermore, we propose that empowered consumers' reactance is motivated by their desire to project an image of independence rather than their desire to actually maintain independence.

Beyond its theoretical significance, the dual impact of power has important practical implications for marketers who rely on word-of-mouth marketing, buzz marketing, social network marketing, and other peer-to-peer marketing practices. When launching a peer-to-peer campaign, marketers anticipate that consumers will respond by adjusting their attitudes to conform to the artificially created norms. However, the reactance effect proposed in this article suggests that, under certain conditions, this strategy could backfire, as empowered consumers may actively rebel against perceived attempts to influence them.

The dual impact of power on social influence is examined in four experimental studies. Studies 1 and 2 show that while low-power consumers tend to conform to the expressed opinions of others, empowered consumers' response is either reflective of independence (when attitudes are more certain) or reactance (when attitudes are less certain). Study 3 shows that empowered consumers' reactance to peer influence is mediated by certainty about power and perceived threat to autonomy. Finally, in support of a self-presentation account, study 4 shows that reactance occurs when evaluations are public but not when they are private.

Power and Consumer Response to Social Influence

Power is defined as an individual's relative control over resources and outcomes (Fiske 1993; Keltner, Gruenfeld, and Anderson 2003). Powerful individuals enjoy a disproportionate access to valuable resources and have greater control over their own and others' outcomes. Valuable resources refer not only to material resources such as money and jobs but also to social resources such as knowledge, respect, and affection.

While power is often associated with the capacity to influence other people (French and Raven 1959), its definition implies that powerful individuals are also less dependent on others for accessing resources and obtaining desirable outcomes (Hollander 1958). Accordingly, powerful individuals' behaviors and expressions are thought to be less constrained by social norms and external circumstances (Fiske and Dépret 1996; Galinsky et al. 2008; Keltner et al. 2003), which may explain why high-power groups were found to display greater behavioral variability and more idiosyncratic tendencies than low-power groups (Guinote, Judd, and Brauer 2002).

Relative freedom from social constraints is also alleged to increase powerful individuals' reliance on their internal states when forming judgments and attitudes. For example, high-power participants in one study indicated that they expressed their true attitudes to a greater extent than did low-power participants (Anderson and Berdahl 2002). Similarly, high-power participants were found to engage in nonverbal behaviors (e.g., smiling) that were consistent with self-reported internal dispositions (e.g., feeling happy) more than low-power participants (Hecht and LaFrance 1998). Moreover, research shows that powerful individuals have higher confidence in their own thoughts, rely more on internal thoughts versus external information in forming attitudes about products and social issues (Briñol et al. 2007), and are more likely to change their judgments based on feelings and subjective experiences than powerless individuals (Weick and Guinote 2007).

The notion that power increases responsiveness to internal states is further supported in studies showing power to magnify the expression of personal dispositions and preferences (Bargh et al. 1995; Chen, Lee-Chai, and Bargh 2001). For example, Chen et al. (2001) found that when possessing power, individuals with a communal orientation act with greater generosity, while those with an exchange orientation behave in a more self-serving fashion. However, when lacking power, participants' communal and exchange orientations fail to predict the extent of their generous versus self-serving behaviors.

Based on the aforementioned discussion, and on empirical evidence of a negative association between status and conformity (Jetten, Hornsey, and Adavres-Yorno 2006; Montgomery 1971), Galinsky et al. (2008) proposed that power ought to shield a person's attitudes from the influence of other people's opinions. The authors made a compelling argument that greater reliance on internal states makes high-power individuals not only pay less attention to external information when forming attitudes but also discount such information when they do notice it. In support of their thesis, Galinsky et al. (2008) found that the powerful express attitudes that conform less to the expressed opinions of others (study 3).

We agree that power generally leads to less conformity. However, we contend that power can lead to different resistance outcomes, depending on the level of certainty with which consumers hold their attitudes toward the evaluation object.

Attitude Certainty, Power, and Social Influence

Attitude certainty refers to the subjective sense of conviction, confidence, or correctness a person has about his or her attitude (Clarkson, Rucker, and Tormala 2008; Tormala and Rucker 2007). Higher levels of attitude certainty are associated with greater attitude-behavior correspondence (Fazio and Zanna 1978) and higher attitude stability over time (Bassili 1996). Importantly, high certainty is also associated with reduced motivation to process external information (Tiedens and Linton 2001; Weary and Jacobson 1997). Presumably, high certainty signals that one possesses sufficient knowledge, which lessens the need to process additional information (such as other people's opinions), whereas low certainty signals that one probably lacks the necessary knowledge, which amplifies the need to attend to new information (Tormala and Rucker 2007).

Because power tends to magnify the influence of subjective experiences (Weick and Guinote 2007), we expect empowered individuals to be particularly sensitive to the effect of attitude certainty (a subjective experience) on motivation to process information. Thus, when feeling certain of their own attitudes, empowered consumers may be less motivated to process other people's opinions and, as a result, may express evaluations that are uninfluenced by those opinions. This “immunizing” effect of power under high-attitude certainty is conceivably what Galinsky et al. (2008) observed in their study. Indeed, participants in the stated study completed an experimental task and then rated how much they enjoyed participating in the task. Because they experienced the task firsthand, these participants were able to rate it with a relatively high degree of certainty (Fazio and Zanna 1987).

In contrast, when attitude certainty is low, we expect empowered consumers to attend more to other people's opinions. Ironically, when attitude certainty is low, empowered consumers are also more likely to interpret these unsolicited opinions as undue pressure to conform, threatening their freedom to express independent evaluations. This heightened perception of threat to their autonomy, in turn, may trigger a reactant response (Brehm 1966), resulting in empowered consumers expressing opinions that intentionally oppose those expressed by others.

We propose that this reactance effect arises because the subjective experience of uncertainty weakens empowered consumers' confidence in their own sense of power. Research on appraisal congruence effects (Lerner and Keltner 2000; Lerner, Small, and Loewenstein 2004; Tiedens and Linton 2001) shows that feelings of uncertainty experienced in one domain often carry over to unrelated domains. Tiedens and Linton (2001), for instance, found that participants induced to feel uncertainty-associated emotions (hopefulness and fear) reported feeling more uncertain about predictions they made in a subsequent task than participants who were induced to feel certainty-related emotions (happiness and disgust). Similarly, Clore and Parrott (1994) found that participants who were induced to feel uncertain through hypnosis later reported feeling less certain of the meaning of a poem than those who were not hypnotized. This line of research suggests that empowered consumers who are induced to feel uncertain about their attitudes toward a product may also start feeling uncertain about their own sense of power.

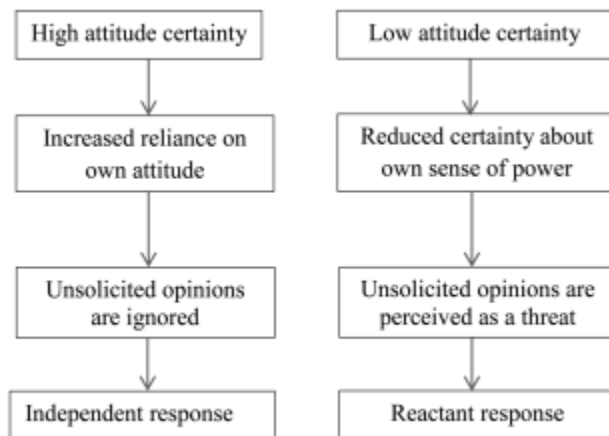


Figure 1. Empowered Consumers' Response to Social Influence under High- and Low-Attitude Certainty

This sense that their power is in question, in turn, could make empowered consumers more susceptible to interpreting others' unsolicited opinions as a threat to their freedom to express independent evaluations, which could then trigger a reactant response (Brehm 1966). This idea is consistent with the broader argument that a loss in confidence in a valued aspect of the self (i.e., sense of power for the powerful in this case) often triggers defensive tendencies (Gao, Wheeler, and Shiv 2008; McGregor et al. 2001; Steele 1988; Vaes and Wicklund 2002). Figure 1 illustrates this dual impact of power. It depicts how empowered consumers may respond to others' unsolicited opinions differently depending on the degree of certainty with which they hold their own attitudes.

Study 1

Method

In this study, we examine how attitude certainty moderates the effect of power on consumer response to social influence. More specifically, we test the idea that reactance is empowered consumers' most likely response when their baseline attitudes are held with low certainty, whereas independence is more likely when attitudes are held with high certainty.

Two hundred sixteen undergraduate students from the University of Calgary (116 men and 100 women) participated in exchange for course credits. Respondents' age ranged from 18 to 36, with a mean of 21.7 and a standard deviation of 2.57. The experiment consisted of a 2 (power: low vs. high) \times 2 (product type: low vs. high attitude certainty) \times 3 (peer feedback: control vs. positive vs. negative) between-subjects design.

Participants' sense of power was manipulated using a mind-set priming technique adapted from previous research (Galinsky, Gruenfeld, and Magee 2003; Murali and Nagpal 2013; Smith and Bargh 2008). Those assigned to the high-power condition were instructed to do the following:

Please recall a particular incident in which you had power over another individual or individuals. By power, we mean a situation in which you controlled the ability of another person or persons to get something they wanted or were in a position to evaluate those individuals. Please describe this situation in which you had power—what happened, how you felt, etc.

Those in the low power condition were instructed to do the following:

Please recall a particular incident in which someone else had power over you. By power, we mean a situation in which someone had control over your ability to get something you wanted, or was in a position to evaluate you. Please describe this situation in which you did not have power—what happened, how you felt, etc.

Next, participants took part in a second, ostensibly unrelated, task, in which they had to evaluate the attractiveness of a new product. Half of the participants were assigned to a product description known to elicit uncertain attitudes and the other half to a product description known to elicit certain attitudes. The stimuli were selected on the basis of a pilot study that assessed

participants' attitudes and attitude certainty toward several new product ideas. The pilot study ($N = 48$) measured participants' attitude certainty on two items ($\alpha = .88$) adapted from previous research (Rucker and Petty 2004). After evaluating each product, participants were asked: "How certain are you of your attitude toward this product?" and "How convinced are you that your attitude toward this product is correct?" These items were rated on 7-point scales (1 = not at all; and 7 = extremely). The product description for "SafeBike" generated the least certain attitudes ($M = 3.19$; $SD = 1.28$), whereas the product description for the "Adaptive Cruise Control System" generated the most certain attitudes ($M = 5.35$; $SD = 1.67$; $F(1, 46) = 34.72$, $p < .01$).

Thus, those in the low-attitude certainty condition saw the following description:

"SafeBike" is a remote-activated bicycle alarm, recently developed by a leading manufacturer of security products. The new product consists of a motion detection device that is lightweight, fits neatly under the seat of the bicycle, and comes complete with an ear-piercing siren and a remote activator/de-activator. The system operates on three "AAA" batteries, which last up to 4 months under normal use. Using the "remote", the system can be armed and disarmed from up to 30 meters away. The siren is set to go off whenever the bike is moved but automatically shuts down and resets itself if activated by accident (e.g., bicycle falls or is accidentally moved while parked).

Those in the high-attitude certainty condition were presented with the following description:

A leading automotive components manufacturer has recently developed an Adaptive Cruise Control System, which automatically adjusts a car's cruise speed to maintain a safe following distance to the vehicle in front. The secret behind the adaptive cruise control system is the use of forward-looking radar to detect the speed and distance of the vehicle in front. If the lead vehicle slows down, the system sends a signal to the engine or braking system to decelerate. When the road is clear, the system will reaccelerate the vehicle back to the set speed.

After reading the product description, participants were presented with a feedback sheet similar to the one used in Galinsky et al. (2008) and were asked to rate how much they liked the product and how useful they found it (1 = not at all; 11 = extremely). The feedback sheet contained 36 lines, such that many participants could provide their ratings on the same page. In the peer influence conditions, the feedback sheet already contained evaluations from 10 other participants, who supposedly completed the product evaluation at an earlier time. One group was given an evaluation sheet containing 10 positive feedbacks (average attitude rating of 9.9/11). Another group received a sheet containing 10 negative feedbacks (average attitude rating of 2.15/11). Finally, a control group received a blank feedback sheet.

Results

Manipulation Checks

Consistent with prior research (e.g., Smith and Bargh 2008), two independent judges blind to the experimental conditions rated the high- and the low-power writings for how much power the

participants seemed to have on a 7-point scale (0 = no power at all, 6 = a lot of power). The judges rated participants in the high-power condition to have significantly more power ($M_{\text{High Power}} = 5.81$) than those in the low-power condition ($M_{\text{Low Power}} = 2.37$; $F(1, 214) = 1,080.53, p < .01$). The inter-rater reliability was also high ($r = .88$).

Power and Consumer Response to Social Influence

We conducted a 2 (low power vs. high power) \times 2 (high- vs. low-attitude certainty) \times 3 (negative feedback vs. no feedback vs. positive feedback) ANOVA, with consumers' attitude toward the product as the dependent variable. The attitude measure was created by averaging participants' ratings of how much they liked the product and how useful they found it ($\alpha = .84$).

The analysis revealed a main effect of feedback ($F(2, 204) = 3.72, p = .03$), a main effect of attitude certainty ($F(1, 204) = 26.78, p < .01$), a power \times feedback interaction ($F(2, 204) = 50.41, p < .01$), a feedback \times attitude certainty interaction ($F(2, 204) = 4.17, p = .01$), and, most importantly, a power \times feedback \times attitude certainty three-way interaction ($F(2, 204) = 3.24, p = .04$). To better understand this three-way interaction, we conducted separate analyses for each attitude certainty condition (see fig. 2).

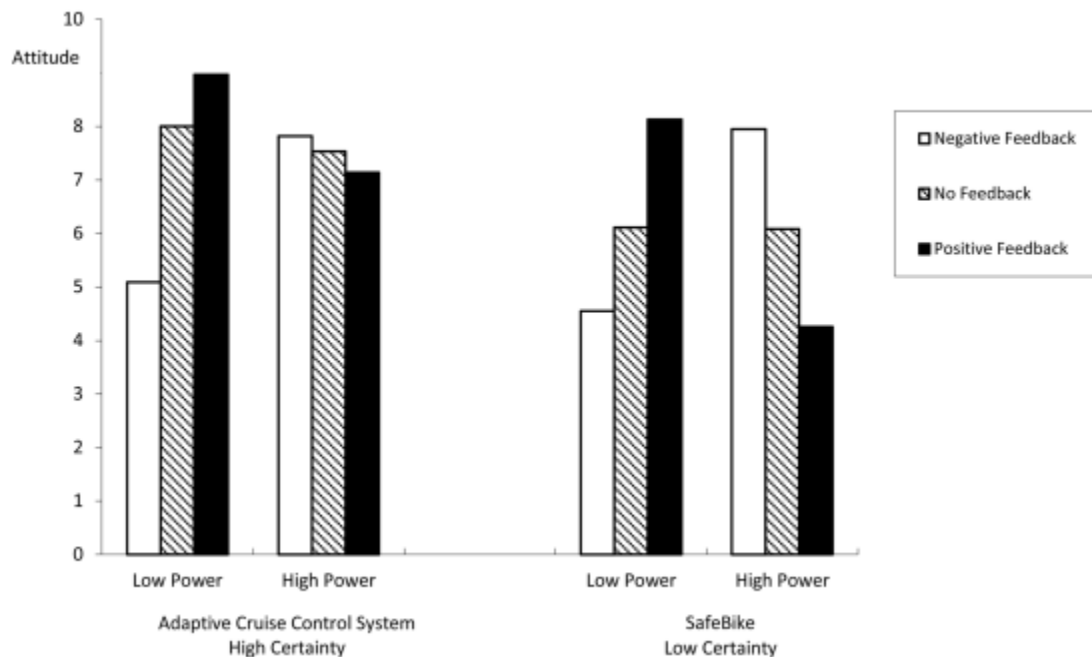


Figure 2. Power, Attitude Certainty, and Response to Social Influence: ACCS versus SafeBike

Results from the high-attitude certainty (Adaptive Cruise Control System) condition indicated no main effect of power on attitude toward the product ($F(1, 204) = .18, p = .67$), a significant main effect of feedback ($F(2, 204) = 7.92, p < .01$), and a significant power \times feedback interaction ($F(2, 204) = 14.92, p < .01$).

When primed with low power, consumers displayed a high level of conformity to the expressed opinions of others. That is, their evaluations of the product were positively influenced by the

ratings of “other participants” ($F(2, 204) = 22.21, p < .01$). They rated the product as significantly less attractive in the negative feedback condition ($M = 5.09$; $SD = 2.08$) than in the baseline (no feedback) condition ($M = 8.0$; $SD = 2.10, t(32) = 4.06, p < .01$). They also rated the product as slightly more attractive in the positive feedback condition ($M = 8.97$; $SD = 1.95$) than in the baseline condition ($M = 8.0$; $SD = 2.10, t(32) = 1.30, p = .17$), though this difference did not reach statistical significance.

In contrast, empowered consumers’ evaluations were unaffected by the evaluations of “other participants.” Their ratings did not vary across the three feedback conditions ($M_{\text{Positive}} = 7.14, M_{\text{Control}} = 7.53, \text{ and } M_{\text{Negative}} = 7.82; F(2, 204) = .63, p = .53$). These findings are consistent with previous research (Galinsky et al. 2008), indicating that under high-attitude certainty, power immunizes a person's attitudes from the influence of others’ opinions.

In the case of low-attitude certainty (SafeBike), the results showed no main effect of power on attitude toward the product ($F(1, 204) = .25, p = .62$), no main effect of feedback ($F(2, 204) = .08, p = .92$), but a significant power \times feedback interaction ($F(2, 204) = 40.2, p < .01$). Powerless consumers showed a high level of conformity to the opinions of others. Their evaluations of SafeBike were positively influenced by the ratings of “other participants” ($F(2, 204) = 19.59, p < .01$). Low-power consumers rated the product as significantly less attractive in the negative feedback condition ($M = 4.55$; $SD = 1.53$) than in the baseline (no feedback) condition ($M = 6.11$; $SD = 1.26, t(36) = 4.41, p < .01$). They also rated the product as significantly more attractive in the positive feedback condition ($M = 8.13$; $SD = 1.66$) than in the baseline condition ($M = 6.11$; $SD = 1.26, t(36) = 4.24, p < .01$).

In contrast, and consistent with a reactance effect, high-power consumers rated the product as significantly less attractive when others rated it positively ($M = 4.26$; $SD = 1.51$) than when they were not exposed to other participants’ ratings ($M = 6.08$; $SD = 1.26, t(36) = 4.02, p < .01$). They also rated the product as significantly more attractive when exposed to others’ negative evaluations ($M = 7.95$; $SD = 1.25$) than when responding on a blank sheet ($M = 6.08$; $SD = 1.26, t(36) = 4.59, p < .01$).

Interestingly, in the absence of any peer influence (i.e., baseline condition), empowered consumers’ attitudes toward SafeBike did not differ from the attitudes of low-power consumers ($M_{\text{High Power}} = 6.08$ vs. $M_{\text{Low Power}} = 6.11; t(36) = .06, p = .95$). However, in the presence of peer influence, our results suggest that empowered consumers deliberately sought to deviate from the opinion expressed by the majority. Their concern with signaling independence was such that their evaluations diverged even from their own privately held attitudes, as measured in the baseline condition.

In sum, data from both the low- and high-attitude certainty conditions revealed that low-power consumers conformed to other people's opinions more than high-power consumers. In addition, the pattern of high-power consumers’ nonconformity differed across attitude certainty conditions. Empowered consumers expressed independent attitudes when attitude certainty was high, while expressing counternormative attitudes when attitude certainty was low.

Discussion

Study 1 demonstrated that power does not always lead to independent responses, as previously thought. Instead, power can sometimes trigger a reactant response to an influence attempt. An important limitation of study 1 pertains to the manipulation of attitude certainty. Although the two products did elicit different levels of attitude certainty, they may have also differed on other important dimensions. Data from the pilot study, for instance, indicate that the Adaptive Cruise Control System not only elicited more certain attitudes than SafeBike, but it was also rated more positively than SafeBike ($M_{\text{ACCS}} = 5.71$ vs. $M_{\text{SafeBike}} = 3.94$ on a 7-point scale; $t(46) = 4.82, p < .01$). Thus, the manipulation of attitude certainty may have confounded the effects of attitude certainty with those of attitude extremity.

We designed a second study to address this important limitation. Study 2 uses a cleaner manipulation of attitude certainty, which controls for differences in attitude extremity and other potential confounds associated with the use of different products to manipulate attitude certainty.

Study 2

Pilot Study

Prior research indicates that people feel more certain of their attitudes when these attitudes are formed through direct experience than when they are formed through indirect experience (Fazio and Zanna 1978; Tormala and Rucker 2007). In this pilot study, we assess the effectiveness of a new manipulation of attitude certainty based on direct versus indirect experience with an evaluation object. An effective manipulation would influence measures of attitude certainty, without altering attitude extremity.

Forty-eight participants at the University of Calgary were asked to evaluate the utility of using logic puzzles as an educational tool for improving analytical skills. The following is a sample puzzle:

A frog is at the bottom of a 30-meter well. Each day he summons enough energy for one 3-meter leap up the well. Exhausted, he then hangs there for the rest of the day. At night, while he is asleep, he slips 2 meters backward. How many days does it take him to escape from the well?

Participants in the low-certainty condition were instructed to simply read through a series of five logic puzzles accompanied by their solutions (indirect experience), while those in the high-certainty condition were asked to try to solve the same puzzles (direct experience). In the latter condition, solutions to the puzzles were provided after the respondents completed the task. Attitudes toward the puzzles were measured using the following three items ($\alpha = .87$): How effective a tool do you think the puzzles are at improving analytical ability? How much do you like the puzzles? How interesting do you find the puzzles to be? Attitude certainty was measured by two items ($\alpha = .88$) adapted from previous research (Rucker and Petty 2004): How certain are you of your evaluations of the puzzles? How convinced are you that your attitude toward the puzzle is correct? All items were rated on 7-point scales (1 = not at all; 7 = extremely).

Respondents in the low- and high-attitude certainty conditions reported similar overall attitudes toward the puzzles ($M_{\text{Low Certainty}} = 4.93$ vs. $M_{\text{High Certainty}} = 4.71$; $F(1, 46) = .36, p = .55$). However, as expected, respondents who worked through the puzzles reported feeling more certain of their attitudes than those who simply read the puzzles ($M_{\text{High Certainty}} = 5.73$ vs. $M_{\text{Low Certainty}} = 4.08$; $F(1, 46) = 32.50, p < .01$). These results support the effectiveness of using direct versus indirect experience to manipulate attitude certainty.

Method

Two hundred and two University of Calgary undergraduate students (104 men, 96 women, and two missing gender information; $M_{\text{age}} = 21.2$; $SD = 2.14$) participated in study 2 in exchange for course credits. Three factors were manipulated in a 2 (power: high vs. low) \times 2 (attitude certainty: high vs. low) \times 3 (feedback: positive vs. negative vs. none) between-subjects design.

The power manipulation was similar to the one used in study 1 with an important difference. A control-power condition was substituted for the low-power condition. Participants in the control-power condition were instructed to write about their day yesterday (Smith and Bargh 2008). Substituting a control group for a low-power group is significant because it allows us to rule out the possibility that the results may be driven by a state of powerlessness rather than a state of power as argued in this article.

As a manipulation check, participants rated the extent to which they felt powerful on a 7-point scale (1 = not powerful; 7 = powerful) immediately following the power manipulation (Rucker, Dubois, and Galinsky 2011). They were then directed to the ostensibly unrelated task of evaluating the puzzles. Attitude certainty was manipulated by randomly assigning respondents to either a direct experience condition or an indirect experience condition as described in the pilot study. After reading/working through the puzzles, participants were presented with a feedback sheet similar to the one used in study 1. They were asked to rate how effective a tool they thought the puzzles were at improving analytical ability; how much they liked the puzzles; and how interesting they found them (1 = not at all; 11 = extremely). As in study 1, the feedback sheet contained 36 lines, such that many participants could provide their ratings on the same page. In the peer influence conditions, the feedback sheet already contained evaluations from 10 other participants, who supposedly completed the puzzles evaluation at an earlier time. One group was given an evaluation sheet containing 10 positive feedbacks (average attitude rating of 9/11). Another group received a sheet containing 10 negative feedbacks (average attitude rating of 2.16/11). A third, control, group received a blank feedback sheet. In addition to the attitude measures, the blank sheet contained a measure of attitude certainty intended as a manipulation check: how certain are you of your evaluations of the puzzles? (1 = not at all; 11 = extremely).

Results

Manipulation Checks

As anticipated, participants in the high-power condition reported feeling more powerful ($M_{\text{High Power}} = 5.21$) than those in the lower-power (control) condition ($M_{\text{Low Power}} = 3.54$; $F(1, 200) =$

67.73, $p < .01$). In addition, those in the direct experience condition reported feeling more certain of their attitudes (assessed in the no feedback condition) than those in the indirect experience condition ($M_{\text{High Certainty}} = 8.50$ vs. $M_{\text{Low Certainty}} = 5.00$; $F = 36.99$, $p < .01$). Neither power ($F(1, 54) = .03$, $p = .93$) nor the power \times certainty interaction ($F(1, 54) = 1.61$, $p = .21$) significantly influenced attitude certainty (assessed in the no feedback condition).

Power and Consumer Response to Social Influence

Participants' ratings of the three attitude measures (effective, like, interesting) were averaged to form a single attitude toward the puzzles index ($\alpha = .91$). We performed a 2 (power) \times 2 (attitude certainty) \times 3 (feedback) ANOVA with the attitude index as the dependent variable.

The analysis yielded a main effect of feedback ($F(2, 190) = 13.15$, $p < .01$), a power \times feedback interaction ($F(2, 190) = 51.43$, $p < .01$), a feedback \times attitude certainty interaction ($F(2, 190) = 6.77$, $p < .01$), and most importantly, a power \times feedback \times attitude certainty three-way interaction ($F(2, 190) = 5.46$, $p < .01$) that is consistent with study 1's findings. To better understand this three-way interaction, we conducted separate analyses for the low- and high-attitude certainty conditions (see fig. 3).

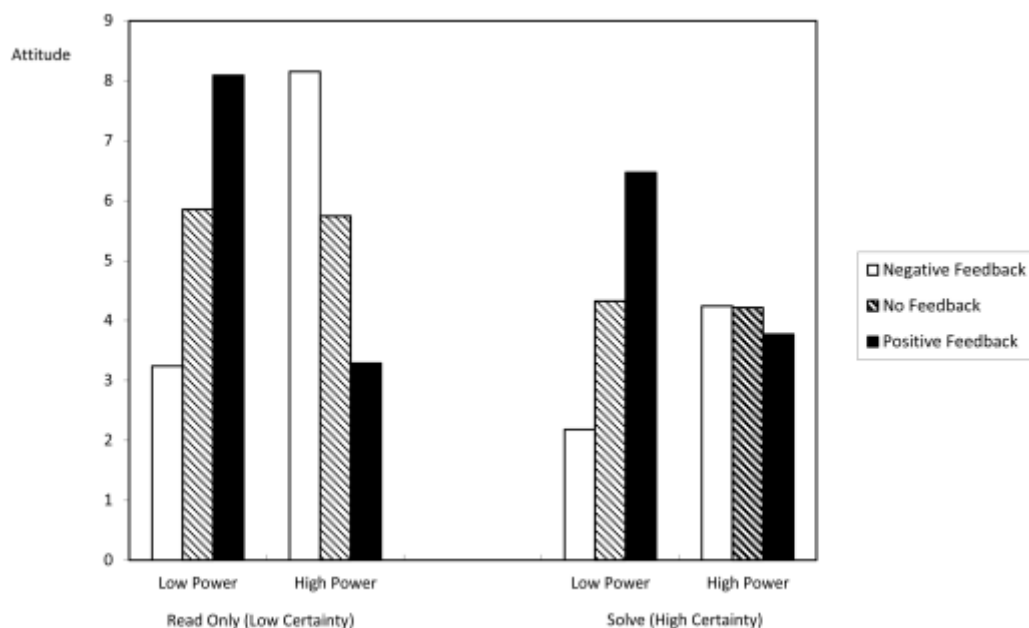


Figure 3. Power, Attitude Certainty, and Response to Social Influence: Seeing versus Doing

Results from the indirect experience (low-attitude certainty) condition replicated those found in the “SafeBike” (low-attitude certainty) condition of study 1. A 2 (power) \times 3 (feedback) ANOVA showed a significant power \times feedback interaction ($F(2, 190) = 13.26$, $p < .01$). Here again, differences in power led to different responses to peer influence. In the high-power condition, peer feedback had a negative influence on consumers' evaluations ($F(2, 190) = 6.51$, $p < .01$). Exhibiting counternormative attitudes, empowered consumers rated the puzzles more positively when exposed to negative feedback ($M = 8.57$; $SD = 1.23$) than in the baseline condition ($M = 7.00$; $SD = 1.68$, $t(30) = 3.04$, $p < .01$). They also rated the puzzles more

negatively in the positive feedback condition ($M = 5.02$; $SD = 2.10$) than in the baseline condition ($M = 7.00$; $SD = 1.68$, $t(30) = 2.68$, $p = .01$).

In contrast, low-power consumers' evaluations varied in the same direction as the evaluations of others ($F(2, 190) = 6.98$, $p < .01$). When exposed to positive feedback, low-power consumers rated the puzzles more positively ($M = 8.91$; $SD = 1.98$) than when not exposed to peer feedback ($M = 6.71$; $SD = 2.25$, $t(32) = 3.03$, $p < .01$). They also rated the puzzles more negatively after receiving negative feedback ($M = 4.54$; $SD = 1.89$) than when they received no peer feedback ($M = 6.71$; $SD = 2.25$, $t(31) = 3.01$, $p < .01$).

Analysis of the direct experience (high-attitude certainty) condition revealed a different pattern of results. A 2 (power) \times 3 (feedback) ANOVA yielded a significant main effect of feedback ($F(2, 190) = 7.18$, $p < .01$), and a significant power \times feedback interaction ($F(2, 190) = 4.33$, $p < .01$). Consumers with low power still conformed to the opinions of their peers, as indicated by a positive effect of feedback on attitude toward the puzzles ($F(2, 190) = 6.07$, $p < .01$). When exposed to positive feedback, low-power consumers evaluated the puzzles more positively ($M = 8.26$; $SD = 1.44$) than when not exposed to peer feedback ($M = 7.22$; $SD = 1.50$, $t(61) = 2.80$, $p < .01$). In addition, they evaluated the puzzles more negatively when exposed to negative peer feedback ($M = 5.63$; $SD = 2.26$) than in the baseline condition ($M = 7.22$; $SD = 1.50$, $t(69) = 3.40$, $p < .01$).

Empowered consumers, however, did not exhibit counternormative attitudes. When attitudes were held with high certainty, empowered consumers' response to social influence was independence, not reactance. Indeed, their attitude toward the puzzles did not vary across the three feedback conditions ($M_{\text{Positive Feedback}} = 7.35$, $M_{\text{No Feedback}} = 7.24$, and $M_{\text{Negative Feedback}} = 6.80$; $F(2, 190) = .70$, $p = .50$).

Discussion

Using a different manipulation of attitude certainty, study 2 replicated study 1's findings that power leads to either independent or reactant responses to social influence. However, neither study assessed the mechanism underlying the reactant response. Why do empowered consumers who feel uncertain of their attitude respond reactively to social influence attempts? We have speculated that because subjective feelings of uncertainty experienced in one domain often carry over to unrelated domains, feeling uncertain about one's attitude toward a product may induce empowered consumers to also feel uncertain about their sense of power. The resulting uncertainty about power, in turn, makes empowered consumers perceive unsolicited feedback as undue pressure to conform, threatening their freedom to express independent evaluations. This heightened perception of threat then triggers the observed reactant response. The chain of effects implied by the proposed mechanism is formally tested in the next study.

Study 3

Method

Two hundred and nine University of Calgary undergraduate students (98 men) participated in study 3 in exchange for course credits. Participants' age varied from 18 to 45, with a mean of 21.1 and a standard deviation of 2.54. Three factors were manipulated in a 2 (power: high vs. low) \times 2 (attitude certainty: high vs. low) \times 2 (feedback: negative vs. none) between-subjects design.

Participants' sense of power was manipulated using the same priming technique as in study 2. Following the power manipulation, participants rated the extent to which they were feeling powerful on a 9-point scale (1 = not at all, 9 = extremely) as a manipulation check. They were then presented with the new product description for "the Adaptive Cruise Control System."

Prior research has shown that retrieval fluency has a significant impact on attitude certainty (Haddock, Rothman, and Schwarz 1996; Haddock et al. 1999; Tsai and McGill 2011). Haddock et al. (1996), for instance, asked participants to generate either seven (low retrieval fluency) or three (high retrieval fluency) arguments in support of their attitude toward a social issue. Those who generated three arguments later rated their attitudes as more certain than those who generated seven arguments. Adopting a similar fluency-based paradigm, we manipulated attitude certainty in this study by asking participants to generate either two or eight arguments in support of their attitude toward the Adaptive Cruise Control System product idea. More specifically, those in the low-attitude certainty (high-attitude certainty) condition were told that "Ultimately, we are interested in how you feel about this product idea, but before indicating your evaluation on the participant feedback sheet, please list 8 (2) reasons for it (i.e., why do you feel the way you do about the Adaptive Cruise Control System)."

To assess the effectiveness of the attitude certainty manipulation, we asked participants, after they listed arguments in support of their attitude, to indicate how confident and how certain they were about their attitude toward the Adaptive Cruise Control System on 7-point scales (1 = not at all confident/certain; 7 = extremely confident/certain). Participants also rated their degree of confidence in their feelings of power on the following 7-point scale: "A moment ago, you rated how powerful you felt. How certain are you of your rating of that feeling?" (1 = not at all certain; 7 = extremely certain).

The next task required participants to indicate how much they liked the product and how useful they found it (1 = not at all; 11 = extremely) on a separate feedback sheet as in the previous studies. The presence versus absence of feedback is theoretically more important than its valence. In fact, in both previous studies, the data patterns obtained in the positive feedback condition mirrored those obtained in the negative feedback condition. Thus, we only included two feedback conditions in the present study. In the negative feedback condition, the feedback sheet contained evaluations from 10 other participants, who supposedly completed the product evaluation at an earlier time (average attitude rating of 2.15/11). The no feedback group received a blank feedback sheet. Finally, perceived threat to autonomy was measured using the following three items adapted from Liu, Smeesters, and Vohs (2012) on 7-point scales (1 = strongly disagree, 7 = strongly agree): (1) When evaluating the product, it felt like someone was trying to influence my opinion; (2) When evaluating the product, it felt like someone was trying to take away my freedom to express my own opinion; and (3) When evaluating the product, it felt like I was being pressured to conform to the opinions of others.

Results

Manipulation Checks

The power manipulation had the intended effect. Participants in the high-power condition reported feeling more powerful ($M_{\text{High Power}} = 6.60$) than those in the control condition ($M_{\text{Low Power}} = 4.47$; $F(1, 207) = 97.81, p < .01$). An attitude certainty index was created by averaging participants' scores on the two attitude certainty items ($\alpha = .95$). We conducted a 2 (power) \times 2 (retrieval fluency) ANOVA on this index and found only a main effect of retrieval fluency ($F(1, 205) = 158.07, p < .001$). As expected, those in the high-retrieval fluency (two reasons) condition reported feeling more certain of their attitudes ($M = 5.61$) than those in the low-retrieval fluency (eight reasons) condition ($M = 3.55$).

Power and Consumer Response to Social Influence

As in study 1, participants' ratings of how much they liked the product and how useful they found it ($\alpha = .93$) were averaged to form an overall attractiveness index. This attractiveness index was submitted to a 2 (power) \times 2 (attitude certainty) \times 2 (peer feedback) ANOVA.

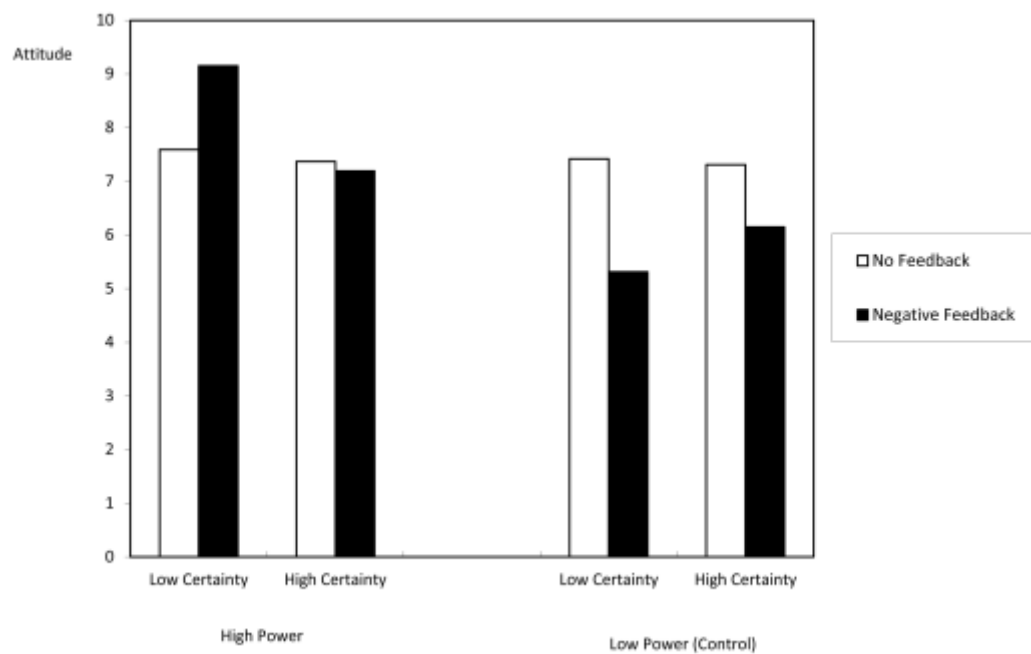


Figure 4. Power, Attitude Certainty, and Response to Social Influence: Two versus Eight Reasons

The analysis showed a marginal main effect of feedback ($F(1, 201) = 3.72, p = .06$), a power \times feedback interaction ($F(1, 201) = 51.43, p < .01$), a feedback \times attitude certainty interaction ($F(1, 201) = 22.49, p < .01$), a power \times attitude certainty interaction ($F(1, 201) = 8.86, p < .01$), and, importantly, a significant power \times attitude certainty \times feedback three-way interaction ($F(1, 201) = 7.57, p < .01$). In studies 1 and 2, our main focus had been on demonstrating that attitude

certainty moderates the effect of power on response to social influence. As a result, we had deconstructed the three-way interaction by analyzing the high- and low-attitude certainty conditions separately. The primary goal of the present study, however, is to test the mechanism underlying empowered consumers' reactant response. Thus, we have conducted separate analyses for the high- and control-power conditions (see fig. 4).

In the high-power condition, a 2 (attitude certainty) \times 2 (feedback) ANOVA revealed a main effect of attitude certainty ($F(1, 201) = 14.98, p < .01$), a main effect of feedback ($F(1, 201) = 5.96, p = .02$), and an attitude certainty \times feedback interaction ($F(1, 201) = 9.43, p < .01$). Consistent with our findings from studies 1 and 2, when empowered consumers felt uncertain about their attitude, they rated the product more positively when exposed to negative feedback ($M = 9.15$) than when not exposed to any peer feedback ($M = 7.59; F(1, 201) = 15.05, p < .01$). In contrast, when empowered consumers felt more certain of their attitude, their ratings did not vary across the negative feedback ($M = 7.19$) and the no feedback ($M = 7.37; F(1, 201) = .20, p = .66$) conditions.

For consumers in the low-power (control) group, a 2 (attitude certainty) \times 2 (feedback) ANOVA revealed only a main effect of feedback ($F(1, 201) = 33.14, p < .01$). Participants rated the product as less attractive when exposed to negative feedback ($M = 5.73$) than when not exposed to any feedback ($M = 7.37$). Attitude certainty did not influence consumers' evaluations ($F(1, 201) = .58, p = .45$) and only attenuated the effect of feedback on evaluations marginally ($F(1, 201) = 2.87, p = .09$).

Power Certainty

In this section, we test the prediction that attitude uncertainty can weaken empowered consumers' confidence in their feelings of power. A 2 (power) \times 2 (attitude certainty) ANOVA on power certainty found a significant main effect of attitude certainty ($F(1, 205) = 47.95, p < .01$), and a significant power \times attitude certainty interaction ($F(1, 205) = 35.58, p < .01$). High-power consumers were more certain of their feelings of power when they were certain about their attitude toward the evaluation object ($M = 5.75$) than when they were uncertain about their attitude ($M = 3.17; F(1, 205) = 83.46, p < .01$). In contrast, consumers in the control group were equally confident about their feelings of power whether their attitude certainty was high ($M = 4.52$) or low ($M = 4.33; F(1, 205) = .46, p = .50$). The results are consistent with the proposed mechanism and the notion that reduced attitude certainty can lower empowered consumers' confidence in their sense of power. Moreover, that attitude certainty seems to influence only empowered consumers is not surprising in light of previous research showing power to amplify the influence of subjective experiences (Weick and Guinote 2007).

At this point, it is important to recognize an alternate explanation of our results. It is possible that the experience of low certainty may simply have lowered empowered consumers' sense of power, rather than decreasing their confidence in their sense of power. Any subsequent reactance could then be attributed to a reduction of power. That is, empowered consumers who felt a loss of power may have reacted against other people's opinions in a bid to reestablish their lost power. To rule out this alternative explanation, we conducted a post-test which consisted of a partial replication of study 3 but with an important difference. Fifty-two participants, who were all

primed with high power, indicated the degree to which they felt powerful immediately after the power prime, and again after the attitude certainty manipulation. Analyses of the post-test data revealed that while the manipulation of attitude certainty influenced empowered consumers' confidence in their feelings of power, it did not impact how powerful they felt (see table 1).

Table 1. Empowered Consumers' Feelings of Power and Power Certainty (Post-test)

	Feelings of power before attitude certainty manipulation mean (SD)	Feelings of power after attitude certainty manipulation mean (SD)	Change in feelings of power mean (SD)	Power certainty mean (SD)
High-attitude certainty condition	6.92 (1.49)	6.54 (1.53)	.38 (.94)	5.73 (1.40)
Low-attitude certainty condition	6.77 (1.37)	6.31 (1.54)	.46 (1.24)	2.85 (1.43)
High- vs. low-attitude certainty	$t = .39, p = .70$	$t = .54, p = .59$	$t = .25, p = .80$	$t = 7.34, p < .01$

Perceived Threat to Autonomy

We averaged the scores on the three measures of perceived threat to create a single threat index ($\alpha = .93$). A 2 (power) \times 2 (attitude certainty) \times 2 (feedback) ANOVA on the threat index revealed a main effect of attitude certainty ($F(1, 201) = 16.61, p < .01$), a main effect of feedback ($F(1, 201) = 26.84, p < .01$), a power \times attitude certainty interaction ($F(1, 201) = 13.37, p < .01$), a power \times feedback interaction ($F(1, 201) = 14.80, p < .01$), an attitude certainty \times feedback interactions ($F(1, 201) = 10.76, p < .01$), and most importantly, a power \times attitude certainty \times feedback three-way interaction ($F(1, 201) = 7.34, p < .01$). To better understand this three-way interaction, we analyzed the high- and control-power conditions separately.

In the high-power condition, a 2 (attitude certainty) \times 2 (feedback) ANOVA found a significant main effect of attitude certainty ($F(1, 201) = 21.17, p < .01$), a main effect of feedback ($F(1, 201) = 28.86, p < .01$), and a significant attitude certainty \times feedback interaction ($F(1, 201) = 12.71, p < .01$). Consistent with predictions, when attitude certainty was low, empowered consumers felt significantly more threatened in the negative feedback condition ($M = 5.44$) than in the baseline condition ($M = 2.91; F(1, 201) = 39.56, p < .01$). When attitude certainty was high, however, empowered consumers perceived little threat to their autonomy regardless of the feedback condition ($M_{\text{No Feedback}} = 2.62$ vs. $M_{\text{Negative Feedback}} = 3.13; F(1, 201) = 1.65, p = .20$).

Consumers in the control-power group felt relatively unthreatened (overall mean = 3.21). Neither attitude certainty ($F(1, 201) = .06, p = .80$), nor feedback ($F(1, 201) = .62, p = .43$), nor their interaction ($F(1, 201) = .11, p = .74$) had any effect on participants' perceived threat to autonomy.

Mediation Analysis

To assess the proposed mechanism, we tested two mediation models. Focusing on empowered consumers, we first tested whether certainty about feelings of power mediates the effect of attitude certainty on perception of threat when the consumer receives unsolicited feedback (moderated mediation model). We then tested whether perceived threat to autonomy mediates

the interaction effect of power certainty \times feedback on product evaluations (mediated moderation model).

Mediation was assessed with the bootstrapping method (Preacher, Rucker, and Hays 2004), using Hayes's (2012) PROCESS macro. A 95% confidence interval (CI) of the parameter estimates was obtained by running resampling 5,000 times. The final estimation results for the two models are summarized in table 2 .

Table 2. The Mediating Roles of Power Certainty and Threat to Autonomy

Paths or effects	Coefficient	SE
Model 1:		
Attitude certainty \rightarrow power certainty (IV effect on the mediator)	2.58 **	.28
Power certainty \times feedback \rightarrow threat (moderated mediator to DV)	.61 **	.13
Attitude certainty \rightarrow threat (total effect of IV on DV)	-1.31 **	.41
Attitude certainty \rightarrow threat, controlling for power certainty, feedback and their interaction (direct effect of IV on DV)	-.30	.33
Attitude certainty \rightarrow threat through power certainty under negative feedback (conditional indirect effect of IV on DV at moderator value = negative feedback)	-1.66 ** ^a	.37
Attitude certainty \rightarrow threat through power certainty under no feedback (conditional indirect effect of IV on DV at moderator value = no feedback)	-.09 ^b	.26
Model 2:		
Power certainty \times feedback \rightarrow threat (interaction effect on the mediator)	.62 **	.13
Threat \rightarrow attractiveness (mediator to DV)	.53 **	.10
Power certainty \times feedback \rightarrow attractiveness (total effect of interaction on DV)	-.15 *	.07
Power certainty \rightarrow attractiveness, controlling for threat (direct effect of IV on DV)	-.18 *	.09
Power certainty \rightarrow attractiveness through threat under negative feedback (conditional indirect effect of IV on DV at moderator value = negative feedback)	-.37 ** ^c	.08
Power certainty \rightarrow attractiveness through threat under no feedback (conditional indirect effect of IV on DV at moderator value = no feedback)	-.04 ^d	.04

Note. CI, confidence interval; DV, dependent variable; IV, independent variable.

^a95% CI for the bootstrap estimate of the indirect effect = [2.44, .99].

^b95% CI for the bootstrap estimate of the indirect effect = [-.62, .43].

^c95% CI for the bootstrap estimate of the indirect effect = [-.54, -.22].

^d95% CI for the bootstrap estimate of the indirect effect = [-.13, .04].

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

Consistent with predictions, the first model indicates that the indirect effect of attitude certainty on threat through power certainty is significant in the negative feedback condition (95% CI = -2.44 to -.99) but not in the no feedback condition (95% CI = -.62 to .43). Furthermore, the second model shows that the indirect effect of power certainty on product attractiveness through threat is significant in the negative feedback condition (95% CI = -.54 to -.22) but not in the no feedback condition (95% CI = -.13 to .04).

Discussion

Study 3 provided some evidence of the chain of effects leading to the observed reactant response. In particular, it showed that inducing empowered consumers to feel uncertain about their attitudes resulted in reduced confidence in their sense of power, which in turn made them

perceive a threat to their autonomy when given unsolicited feedback about other people's opinions. The threat perception then led to reactance.

Nevertheless, how perceived threat to autonomy exactly motivates reactance remains unclear. Early theorists (e.g., Brehm 1966) explained reactance in terms of an effectance motivation. They argued that reactance stems from individuals' desire to maintain their behavioral freedom. Later research, however, disputed the effectance motivation account and offered a self-presentation interpretation of reactance (Baer et al. 1980; Baumeister 1982; Heilman and Toffler 1976). This line of research suggests that "people are more concerned with managing the impression of autonomy than they are with actually maintaining autonomy" (Baer et al. 1980, 416). Heilman and Toffler (1976) provided strong evidence supporting the self-presentation interpretation. They first provided participants with a threatening influence message, presumably written by a coworker, and then gave them either a choice or no choice of how they may comply. Having a choice is expected to reduce reactance according to the effectance motivation account (Brehm 1966). However, reactance was only reduced when the coworker gave the choice and not when it was assigned by a random event. The authors concluded that individuals' concerns about freedom are interpersonally motivated. Baer et al. (1980) offered further support to the self-presentation view. They provided respondents with a communication threatening their freedom to hold a particular attitude. Prior to the threat, participants were provided with either an opportunity to exercise their freedom in public, an opportunity to exercise their freedom in private, or no opportunity to exercise their freedom. Baer et al. (1980) found that reactance was reduced only when the prior exercise of freedom was public and not when it was private. In line with the self-presentation interpretation of reactance, we propose that empowered consumers' reactant response under low-attitude certainty is motivated by a desire to signal or project independence and individuality rather than a desire to actually maintain these qualities. One implication of this signaling account is that reactance is more likely to occur when consumers' evaluations are public than when they are private (Baer et al. 1980). We test this prediction in the next study.

Study 4

Method

Two hundred sixteen undergraduate students from the University of Calgary (124 men) received \$10 each for their participation in study 4. Participants' age varied from 18 to 33 years, with a mean of 20.7 and a standard deviation of 2.15 ($N=214$). Study 4 focused on situations of low-attitude certainty and consisted of a 2 (high power vs. control) \times 2 (private vs. public evaluation) \times 3 (negative feedback vs. positive feedback vs. no feedback) between-subjects design.

Power was manipulated as in study 2. Following the power manipulation, participants rated the extent to which they felt powerful on a 7-point scale (1 = not powerful, 7 = powerful) as a manipulation check (Rucker et al. 2011). They were then presented with the new product description for "SafeBike" (low attitude certainty) and proceeded to indicate their evaluations on a feedback sheet as in the previous studies. Participants in the public evaluation condition were told:

We are particularly interested in hearing about your evaluations of the product. To that end, after you have formed your impressions of the product you will be asked to discuss your evaluations with the experimenter and any other participants in the room today.

Those in the private evaluation condition were told:

Please remember that all of your responses will be anonymous and confidential. To this end, do not write your name on your questionnaire and place it in the envelope provided when you have completed the study. (White and Peloza 2009)

The signaling hypothesis predicts that power would lead to reactance when evaluations are public but not when they are private.

Results

Manipulation Check

As expected, participants in the high-power condition reported feeling significantly more powerful ($M = 5.30$; $SD = 1.16$) than those in the control condition ($M = 2.81$; $SD = 1.11$, $F(1, 214) = 265.70$, $p < .01$). To test the signaling hypothesis, we conducted a 2 (low power vs. high power) \times 2 (private vs. public evaluation) \times 3 (negative feedback vs. no feedback vs. positive feedback) ANOVA, with consumers' attitude toward the product as the dependent variable. As in study 1, we created an attitude index by averaging participants' ratings of how much they liked the product and how useful they found it ($\alpha = .93$).

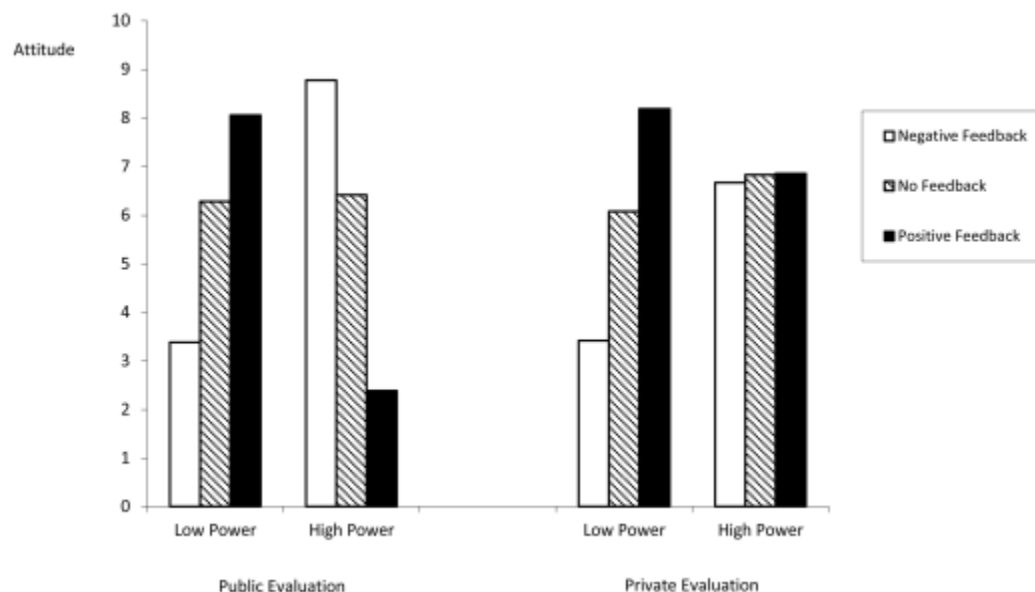


Figure 5. Power and Response to Social Influence: Public versus Private Evaluation

The analysis revealed a main effect of feedback ($F(2, 204) = 10.75$, $p < .01$), a main effect of power ($F(1, 204) = 6.29$, $p = .01$), a main effect of evaluation condition ($F(2, 204) = 7.35$, $p < .01$), a power \times feedback interaction ($F(2, 204) = 180.45$, $p < .01$), a power \times evaluation

condition interaction ($F(2, 204) = 7.74, p < .01$), a feedback \times evaluation condition interaction ($F(2, 204) = 34.13, p < .01$), and most importantly, a power \times feedback \times evaluation condition three-way interaction ($F(2, 204) = 31.14, p < .01$). To better understand this three-way interaction, we conducted separate analyses for the public and private conditions (see fig. 5).

The pattern of results in the public evaluation condition was consistent with the previous studies. A 2 (power) \times 3 (feedback) ANOVA found a significant power \times feedback interaction ($F(2, 204) = 127.98, p < .01$). In the high-power condition, peer feedback had a negative influence on consumers' evaluations ($F(2, 204) = 120.78, p < .01$). Exhibiting counternormative attitudes, empowered consumers rated the product as more attractive when exposed to negative feedback ($M = 8.78$; $SD = 1.30$) than in the baseline condition ($M = 6.14$; $SD = 1.03, t(34) = 6.04, p < .01$). They also rated the product as significantly less attractive in the positive feedback condition ($M = 2.39$; $SD = .56$) than in the baseline condition ($M = 6.14$; $SD = 1.03, t(34) = 14.56, p < .01$).

Low-power consumers' evaluations varied in the same direction as the evaluations of others ($F(2, 204) = 36.36, p < .01$). When exposed to positive feedback, low-power consumers rated the product as significantly more attractive ($M = 8.06$; $SD = 2.01$) than when not exposed to peer feedback ($M = 6.27$; $SD = .69, t(34) = 3.54, p < .01$). They also rated the product as significantly less attractive after receiving negative feedback ($M = 3.38$; $SD = .93$) than when they received no peer feedback ($M = 6.27$; $SD = .69, t(34) = 10.56, p < .01$).

Results from the private evaluation condition revealed a different pattern. A 2 (power) \times 3 (feedback) ANOVA indicated a significant main effect of feedback ($F(2, 204) = 36.71, p < .01$), a main effect of power ($F(2, 204) = 8.53, p < .01$), and a significant power \times feedback interaction ($F(2, 204) = 18.96, p < .01$). Consumers with low power still conformed to the opinions of their peers, as indicated by a positive effect of feedback on product evaluations ($F(2, 204) = 53.65, p < .01$). When exposed to positive feedback, low-power consumers evaluated the product more positively ($M = 8.19$; $SD = 1.21$) than when not exposed to peer feedback ($M = 6.08$; $SD = 1.29, t(34) = 5.04, p < .01$). In addition, they evaluated the product more negatively when exposed to negative peer feedback ($M = 3.42$; $SD = .79$) than in the baseline condition ($M = 6.08$; $SD = 1.29, t(34) = 7.45, p < .01$).

Empowered consumers, however, did not exhibit counternormative attitudes. As predicted, when the evaluation was private, empowered consumers' response to social influence was independence, not reactance. Indeed, their ratings of the product attractiveness did not vary across the three feedback conditions ($M_{\text{Positive}} = 6.86, M_{\text{Control}} = 6.83, \text{ and } M_{\text{Negative}} = 6.67; F(2, 204) = .06, p = .94$).

Discussion

Results from study 4 are highly consistent with the signaling hypothesis. They support the view that self-presentational goals, and not effectance goals, motivate empowered consumers' reactance. The findings from study 4 also raise an interesting question about the previous studies. Why was reactance observed in the first three studies despite the lack of an explicit public setting? We believe that despite a lack of an explicit public setting, participants in the previous studies did not perceive their evaluations to be completely private. Three design features may

have contributed to the lack of perceived privacy: (1) there were always other participants in the lab; (2) the “feedback sheet” on which participants reported their evaluations included the purported handwritten evaluations of other participants; and (3) we used a conceptualization and manipulation of social power as power over others. It is possible that priming social power implicitly increases the presence of others. For these reasons, we believe that perceived privacy only became salient when participants were explicitly reminded of the private nature of the study.

General Discussion

This research examined how consumers’ sense of power affects the way they respond to social influence. Prior work (Briñol et al. 2007; Galinsky et al. 2008; Jetten et al. 2006) suggests that empowered consumers’ evaluations should be impervious to others’ opinions because empowered consumers either pay no attention to other people's opinions or dismiss them entirely when judging a product's attractiveness. In contrast, we argued that empowered consumers are less likely to discount others’ opinions when they lack confidence in their own attitudes. Although low-attitude certainty can motivate empowered consumers to pay greater attention to other people's opinions, it does not make them conform more to those opinions. On the contrary, we proposed that because attitude uncertainty can weaken their confidence in their sense of power, empowered consumers are more prone to perceiving others’ unsolicited opinions as a threat to their freedom to express independent evaluations and, as a result, more likely to become reactant. Finally, we argued that empowered consumers’ reactance is motivated by a desire to signal their independence rather than a desire to actually maintain independence. Data from studies 1 and 2 offered consistent support to the proposed dual impact of power on response to social influence. In addition, study 3 found that empowered consumers’ reactant response was mediated by power uncertainty and perceived threat to autonomy. Study 4 focused on the motivation behind the reactance effect. Consistent with the signaling hypothesis, it found that reactance occurred when evaluations were public but not when they were private.

These findings have several implications. Theoretically, they contribute to the literature on reactance and consumer conformity by delineating the intricate role of power as an important determinant of consumers’ response to social influence. They also add to our understanding of the cognitive processes triggered by power. For example, prior research indicates that power acts primarily as a determinant of thought confidence (Briñol et al. 2007). Our studies, however, show that power and attitude certainty (conceptually similar to thought confidence) can have independent as well as interactive effects on subsequent cognitions. Thus, while the powerful may generally be more confident in their thoughts, they also behave differently when their thoughts are held with more or less confidence.

The findings have practical implications as well. Marketing practitioners often attempt to integrate social influence in their communication strategies. This is reflected in the increasing popularity of word-of-mouth marketing, social network marketing, buzz marketing, and other peer-to-peer marketing practices (Kozinets et al. 2010; Trusov, Bucklin and Pauwels 2009). Such practices typically consist of artificially engineering conversations about a product with the goal of creating a “buzz” and influencing consumers’ attitudes toward the product. Consider BZZAGENT INC. This specialized company, whose client list includes PHILIPS,

DUNKIN' DONUTS, and DANONE, operates by recruiting "passionate, vocal, and connected" advocates who "talk up" a client brand throughout social media and in face-to-face settings. Our results indicate that peer-to-peer marketing practices and customer empowerment may not be compatible. That is, firms that succeed in empowering their customers may find it difficult to implement a successful peer-to-peer campaign, because empowered consumers either ignore or rebel against any perceived attempt to influence them. This prompts an important question: how can marketers successfully persuade empowered consumers? Research on goal turnoff effects (Bargh, Green, and Fitzsimons 2008; Monin and Miller 2001) suggests that once an active goal is satisfied, it deactivates. That is, it no longer influences subsequent cognition and behavior. Monin and Miller (2001), for instance, found that compared to a control group, those who had an opportunity to disagree with sexist comments were later more inclined to recommend a man over a woman for a stereotypically male job. Presumably, participants who had an opportunity to disagree with sexist statements have satisfied their goal to be egalitarian and were no longer guided by it in the subsequent task. Similarly, Bargh et al. (2008) found that participants who satisfied the goal of helping a task partner were later less likely to help others in need. Thus, it is possible that providing empowered consumers an opportunity to signal their independence prior to the focal task may reduce the effect of power on reactance. Future research would benefit from testing this strategy in different persuasion contexts such as personal selling. Would salespeople encounter fewer objections from empowered consumers if the latter had a chance to signal their independence? How could a salesperson best encourage a prospect to signal independence prior to the closing stage?

Another important avenue for future research would be to investigate potential moderators of the reactance effect triggered by power. The present research is based on a classical, self-focused, conceptualization of power as power over others, which emphasizes the importance and desirability of such self-serving qualities as status, independence, and prestige (Fiske 1993; Keltner et al. 2003). More recent theorizing (Torelli and Shavitt 2010), however, suggests that different cultures may have different ideas of what is desirable and meaningful to do with power. While a self-focused view of power is common in cultures high on vertical individualism (e.g., North America), cultures that are high on horizontal collectivism tend to hold a more socialized view of the concept of power. Power in such cultures is associated with greater focus on others' needs and benefits (Torelli and Shavitt 2010). It is possible that individuals with a high sense of socialized power (vs. self-focused power) would be less susceptible to perceiving others' opinions as a threat to their autonomy and generally less concerned with signaling their independence to others. Thus, culture could play an important role in moderating the effect of power on response to social influence.

Other interesting moderators may include the length of time and perceived legitimacy associated with power. High-power individuals might display significantly less reactance when they perceive their power to be legitimate versus illegitimate, and when their power is well established versus newly acquired. Our studies suggest that the desire to signal independence and the ensuing reactance are triggered by a perception of threat to autonomy. It is possible that powerful individuals who are used to the idea of possessing power and perceive it to be legitimate would feel less threatened by others' opinions than those who have been made newly conscious of their power or those who perceive their power to be illegitimate.

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