



Power and Message Framing: the Case of Comparative Advertising

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Abstract

Two studies tested the hypothesis that power affects an individual's likelihood to be influenced by positively vs. negatively framed comparative messages. Experiment 1 showed that individuals with a higher personal sense of power are more persuaded by positively framed messages than negatively framed messages. Experiment 2 showed that this effect is partly attributable to higher power individuals being more suspicious of the negatively framed communicator's motivation. Message frame did not have a significant influence on individuals with lower levels of power. These results have important implications for tailoring comparative messages aimed at persuasion toward targets with different levels of power.

Keywords Power · Message framing · Comparative advertising · Advertiser attributions · Persuasion

1 Introduction

Imagine that as the human resource manager of a company, you are trying to persuade an employee to relocate. Should you emphasize the opportunities to be gained by relocating, or the opportunities lost by not relocating? This common dilemma illustrates a classic persuasion situation: a person's preference among options may be influenced by the manner in which the options are framed. Seemingly minor differences in framing have been found to carry surprisingly significant

import to an individual's judgment and decision-making. For example, subjects rated beef described as 75% lean (positive frame) as almost 2 points tastier on a 5-point scale than the same beef labeled as 25% fat (negative frame) [22]. However, the reverse effect was found with doctoral candidates as respondents: increases in registration fees after a certain date framed negatively as a "late penalty" led to significantly more early registrations (93%) than fees framed positively ("early discount"; 67%) [9]. These contradictory effects underscore the importance of studying the framing effect, as well as understanding its boundary conditions.

An important human characteristic is power which can be vested either in the message source [3] or in the message receiver. Viewers of a persuasive message may differ in power because they may have a high or low socioeconomic status, or situational cues may render them as more or less powerful. The current research sets out to examine how the persuasiveness of positive- or negative-framed messages may interact with the message recipient's power in influencing processing and judgmental outcomes. The interaction we examine between power and message frame is based on the conceptual principle that congruency between message characteristics and individual characteristics promotes favorable judgments.

2 Theoretical Background

Positive- and negative-framed messages have been examined across two types of message framing (attribute vs. goal; [23]).

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Attribute framing refers to a message wherein the positive versus negative aspect(s) of a single feature or attribute are the focus of the frame. This type of framing is widely used in settings such as comparative messaging [3], in which advertisers either emphasize the positive properties of the advertised product vis-à-vis that of a comparison product, or the negative properties of one or more competitors' product(s) vis-à-vis the advertised product [34]. Positive frames are generally more effective, and advertisers who use a positive frame are perceived as being more believable and less manipulative [14]. In particular, the positive (vs. negative) frame is often construed as a prime that activates favorable (vs. unfavorable) associations in memory, which subsequently activates more (vs. less) positive evaluations [28].

Goal framing represents a context where the focus is less on the features of an option and more on the relationship between behaviors and goals (e.g., an action leads to outcome A vs. inaction leads to an outcome which is the opposite of A). The direction of the goal framing effect depends on the prevention or promotion focus of the goal. When female students were exposed to either positively or negatively framed messages about breast self-exams (BSE) (“... Women who do [do not do] BSE have an increased [decreased] chance of finding a tumor...”), the negatively framed messages were more effective in motivating BSE [31]. Similarly, when students were exposed to positively or negatively framed messages (“By participating in exercise, you will...” vs. “By not participating in exercise, you will fail to...”) from either credible or non-credible sources, credible sources and positively framed messages led to stronger intention to exercise, a promotion-focused endeavor [16]. In sum, a negative frame likely evokes a negative intention toward the advertiser and a positive frame likely suggests a positive intention that an advertiser possesses. Our focus in this paper is on comparative advertising which, by definition, represents attribute framing.

The persuasive effects of frames depend not only on frame characteristics but also on characteristics of the message recipient. In a health message framing study, the effectiveness of a message varying in its frame depended on its relevance to the recipient [21]. While negative framing was found to be more effective for a healthy population, positively and negatively framed messages were equally effective for the patient population. Other research showed that the effectiveness of message frames depends on the prevention/promotion orientation of the respondents [15]. For prevention-focused recipients, negative frames resulted in higher evaluations for the advertised brand, but for promotion-focused recipients, positive frames were more persuasive. As stated earlier, in this paper, we examine how sense of power—another message recipient characteristic—influences receipt of positive- and negative-framed persuasive messages.

2.1 Power

Power, which refers to perceived control over valued resources in a social relationship [26], is considered one of the most important forms of social influence. While power has mostly been construed as a situational factor that waxes and wanes with the amount of valued resources one holds (i.e., social power; see [10, 26]), it could also be construed as one's perception of one's own ability to influence outcome [2]. Simply imagining being the boss is sufficient to increase power-stereotypic behaviors relative to a control group of respondents who imagined scenarios non-relevant to power [5]. Taking the resource distributor role in behavioral games such as the dictator game and ultimatum game has also been found to temporarily increase social power [35]. While personal power is relatively stable within a certain context, it can change across contexts (e.g., romantic relationship vs. work) [2]. While closely related, social and personal power could have unique effects on behavior; consequently, we examined the effects of both social and personal sense of power.

Research has documented differences in more and less powerful individuals in terms of their communication styles, and internally versus externally motivated expression. Specifically, powerful individuals have been found to speak faster and often are more direct and to the point. They are also less polite, assume a more expansive posture in interpersonal settings, and are more likely to act in accord with their personal beliefs and preferences (for a review, see [6]). Consequently, it appears that different strategies are likely to succeed at persuading high and low power individuals. However, relatively little research has examined the issue of suitable and appropriate communication strategies aimed at influencing people varying in power [4]. In particular, research is silent on how consumers varying in power respond to persuasive advertising messages. The current article represents an early effort toward filling this gap.

2.2 Power and Framing

The central motivation for our predictions is the approach inhibition theory of power [17]. The basic tenet of this theory is that enhanced power activates the behavioral approach system leading to increased attention to gains; and reduced power leads to the activation of the behavioral inhibition system resulting in greater focus on threats. A positively framed comparative ad highlights the relative superiority of the advertiser while featuring positives of both, the advertiser as well as its competitor but. It thus represents an approach message (see also [15]). Since high power is associated with the behavioral approach system, high power respondents should be more persuaded by a positively framed message. A negatively framed comparative ad, while claiming the advertiser's relative superiority, does so by using the competitor's negative

features as the fulcrum. This represents a “mixed” message—approach toward the advertiser and inhibition aimed at the competitor. Low power is associated with the behavioral inhibition system; however, neither of the two comparative messages represents inhibition exclusively. Consequently, low power respondents should be indifferent between the two frames.

As regards process, compared to low power participants, high power participants categorize events at a high compared to low level of abstraction [36]. For example, the 9/11 tragedy was described in more abstract terms by government officials (high power) than volunteers and victims (low power; [27]). Since a high-level construal facilitates the understanding of “why” [40], individuals with high (vs. low) power should be more vigilant to the reason/motivation underlying an observed outcome. In accord, people with high power show reduced gratitude toward a favor-giver because they have a cynical view of the favor-giver’s intentions [13]. Also, they sometimes attribute positive intentions toward others and develop more trust [25]. In other words, as compared to low power consumers, high power individuals tend to be more sensitive to the motivation of a message source and more readily assume intent on the part of the source.

Specific to comparative advertising, positive framed messages lead to more positive advertiser attributions than negative frames, and are perceived to be more believable, less manipulative and consequently, more persuasive [14]. Because high power individuals tend to attribute intent to a greater degree than low power people, we expect that such frame-related attributional differences will be more pronounced among individuals with high (vs. low) power. Stated formally:

H₁: People with high power will evaluate the advertiser in a positively framed comparative message more favorably than one in a negatively framed message; people with low power will evaluate the advertiser similarly in a positive or a negative message.

H_{2a}: People with high power will form more positive attributions toward the advertiser when exposed to a positively framed message than a negatively framed message; advertiser attributions of people with low power will not vary by message frame.

H_{2b}: Advertiser attributions will mediate the effect of power and framing on evaluations.

3 Overview of Studies

We tested these hypotheses in two experiments. The first focused on the influence of personal sense of power on responses to exposure to comparative messaging. This allowed

us to observe the influence of power on framing without changing participant’s preexisting level of power. In the second experiment, we manipulated power and studied its influence on comparative message framing effects. Experiment 2 also tested whether the effect was mediated by high power participants’ increased suspicion of the advertiser’s motivation (hypothesis 2).

4 Experiment 1

This experiment tested whether personal sense of power influences an individual’s likelihood to be influenced by positively and negatively framed messages in the domain of comparative messaging. We expected that participants with a higher personal sense of power would be persuaded by positively framed ads as compared to negatively framed ads, while participants with low personal sense of power would be influenced by framing to a lesser extent, or not at all.

4.1 Method

Participants ($N = 197$) were recruited from an online panel (Amazon Mechanical Turk, 105 female, $M_{age} = 36.5$) in exchange for a small payment. Participants responded to an eight-item sense of power scale ($\alpha = .90$; [2]), which measures an individual’s chronic sense of power. Across 5 studies, Anderson et al. [2] found that this trait measure tapped successfully into the personal power construct besides being “coherent within social contexts,” “moderately consistent across relationships,” “organized at multiple levels of abstraction,” and reliably “related...to personality variables” (p. 337). Subsequent research has documented its wide-ranging effects including associations with leaders’ stress levels [33], self-concept consistency and authenticity [20], and subjective well-being [19]. Sample items of this scale are “If I want to, I get to make the decisions,” “Even if I voice them, my views have little sway (reversed-coded),” and “I think I have a great deal of power” (higher scores indicate higher sense of power).

Participants were then randomly assigned to the positive or negative message condition where they were exposed to a “test ad” for an airline and were asked to go through the ad as if they were reading a magazine at home. In the positive (negative) ad condition, participants read an ad with a headline, “Now J.D. Power and Associates validates what we have been saying all along... It makes more (less) sense to fly Airline A as compared to Airline B.” The ad copy talked about how Airline A (Airline B) was better (worse) than Airline B (Airline A) (please see Appendix 1 and 2 for the stimuli). Next, participants were asked to indicate their purchase intention toward the advertised brand (i.e., Airline A) on two 7-point scales: “The probability that I would consider buying the advertised product is high,” and “My willingness to buy the

advertised product is high” ($r = .85, p < .001$; 1 = strongly disagree, 7 = strongly agree). Finally, participants provided demographic information.

4.2 Results

Purchase Intention Four participants were excluded from the analysis because they were identified by box-plot method as extreme outliers based on the time spent on the ad (time > 175 s). Regressing power, ad (dummy-coded), their interaction, and age and gender on purchase intention revealed a marginally significant effect of age ($\beta = -.01, t(187) = -1.92, p = .06$, semipartial correlation = $-.14$), and more importantly, a significant interaction of power \times ad ($\beta = .39, t(187) = 2.10, p = .04$, semipartial correlation = $.143$; see Fig. 1). Spotlight analysis [37] suggested that participants who believed they had more power (one standard deviation above the mean of the power scale) expressed greater purchase intention for Airline A after reading a positively framed message ($M_{positive} = 5.27$ vs. $M_{negative} = 4.04, t(187) = 4.52, p < .001$). Respondents who believed they had less power (one standard deviation below the mean) had equal purchase intention toward Airline A across the two message frames ($M_{positive} = 4.43$ vs. $M_{negative} = 4.00, t(187) = 1.58, p = .12$).

5 Experiment 1: Purchase Intention

5.1 Discussion

This study finds that consumers with high power were more likely to purchase Airline A (the advertised brand) after they read about the brand in a positively framed message than a negatively framed message. In contrast, consumers with low

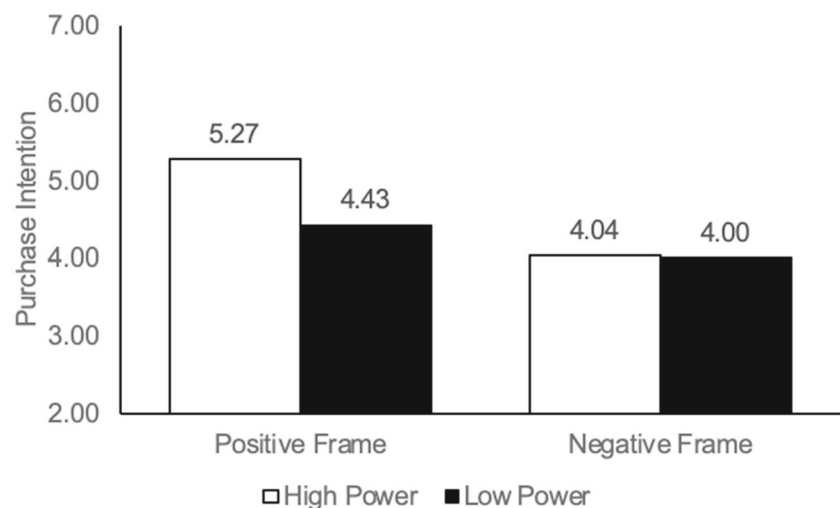
power were equally likely to purchase Airline A after they read about the brand in a positively or a negatively framed message. This study provides initial support to H_1 .

The limitation of this experiment is that power was not manipulated, and thus a causal relationship between power and likelihood to be influenced by message frames could not be established. Sturm and Antonakis [39] express the concern that not only may self-reported measures unintentionally produce demand effects, there is also not sufficient research demonstrating whether the sense of power scale is stable and consistent over time and contexts. Furthermore, it is yet unclear how power influences the receipt of comparative messaging, i.e., what is the psychological process that drives the interactive effect of power and message frame. In particular, we wanted to test H_{2a} and H_{2b} and examine if indeed attributional thinking was the mechanism underlying this interaction. Accordingly, experiment 2 served three purposes: (a) replicate experiment 1, (b) address the aforementioned challenges to experiment 1, and (c) investigate process issues.

5.2 Experiment 2

In this experiment, we manipulated power and tested its influence on attribute (comparative framing). Power was manipulated through randomly assigning subjects to imagining being the boss or the employee in an organizational setting. Specific to the mechanism, and based on the persuasion knowledge model [8], we tested a well-documented mediator in the domain of comparative messaging: advertiser attributions. Research shows that perceivers take the motivation of the advertiser into consideration when making judgments based on the information contained in ads. Consumers are especially likely to perceive advertisers who use negatively framed comparative ads as being unbelievable and manipulative, and thus

Fig. 1 Experiment 1: purchase intention



EXPERIMENT 1: Purchase Intention

evaluate such ads more negatively [14]. Given that high power individuals tend to make attributions more readily than low power individuals [13, 25], is it possible that they may also be more suspicious of the advertiser's motivation as compared to low power individuals? We tested this hypothesis through respondents' perceptions of the advertiser.

5.3 Method

Participants ($N = 154$) were recruited from an online panel (Amazon Mechanical Turk, 84 female, $M_{age} = 35.90$) for a small payment and were randomly assigned to power (high vs. low) \times message frame (positive vs. negative) between-subjects conditions. Power was manipulated via a mental role-playing task [32]. Participants were asked to imagine being a boss (or an employee) at a company. In the boss (high power) condition, they were asked to vividly imagine what it would be like to be a boss: "As a boss, you are in charge of directing your subordinates in creating different products and managing work teams. You decide how to structure the process of creating products and the standards by which the work done by your employees is to be evaluated. As the boss, you have complete control over the instructions you give your employees. In addition, you also evaluate the employees at the end of each month in a private questionnaire—that is, the employees never see your evaluation. The employees have no opportunity to evaluate you." In the employee (low power) condition, they were asked to vividly imagine what it would be like to be an employee: "As an employee, you are responsible for carrying out the orders of the boss in creating different products. The boss decides how to structure the process of creating these products and the standards by which your work is to be evaluated. As the employee, you must follow the instructions of the boss. In addition, you are evaluated by the boss each month, and this evaluation will be private, that is, you will not see your boss's evaluation of you. This evaluation will help determine the bonus reward you get. You have no opportunity to evaluate your boss." Next, to strengthen the manipulation, they were asked to write a few lines about their role as a boss (or an employee) at the company as described above.

Following the manipulation of power, participants were exposed to the same airline comparative ad used in study 1. Participants were then asked to indicate their purchase intention on the same 7-point scales as in study 1 ($r = .89, p < .001$). To test mediation, subjects indicated their opinions about the advertiser on four 7-point scales as a measure of advertiser attribution, anchored by (1 = dishonest, 7 = honest; 1 = manipulative, 7 = non-manipulative; 1 = subjective, 7 = objective; and 1 = insincere, 7 = sincere; $\alpha = .84$; lower scores represent greater suspicion in advertiser attribution). As a manipulation check for the message frame, participants responded to five items: "In your opinion, the ad, 1 = criticized/derogated/put

down/tried to damage the reputation of/was hostile to one or more competitors," 7 = complimented/did not derogate/praised/did not try to damage the reputation of/was gentle to one or more competitors; $\alpha = .92$). Finally, participants provided demographic information.

5.4 Results

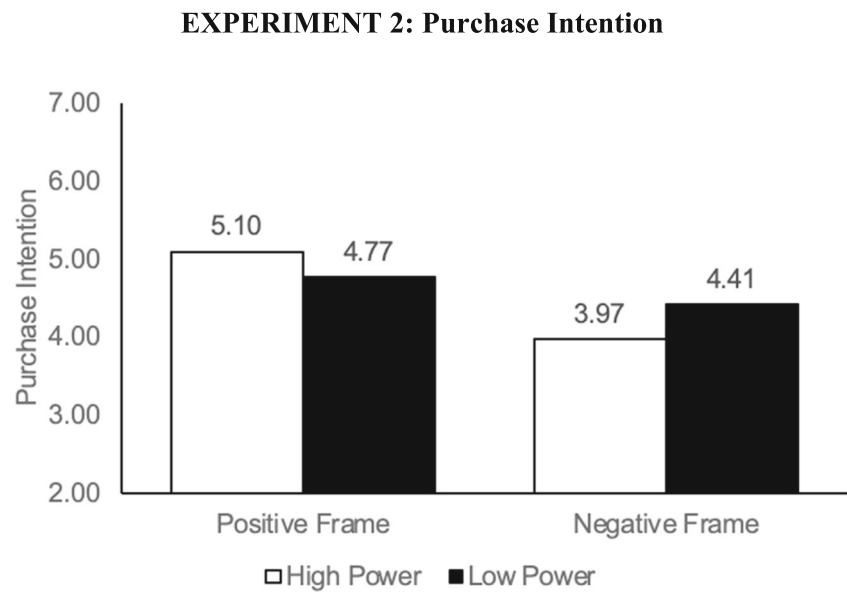
Manipulation Check Three participants were excluded from the analysis because they spent too much time on the ad (time > 210 s), suggesting that they may have been distracted while reading the ad. A 2 power (high vs. low) \times 2 ad (positive vs. negative) ANCOVA was conducted on the manipulation check of the ad frame, with age and gender as covariates, revealing significant main effects of ad ($F(1,145) = 13.08, p < .001, \eta_p^2 = .083$) and age ($F(1,145) = 3.81, p = .05, \eta_p^2 = .026$). Planned contrasts revealed that participants believed that the advertiser was more benevolent to the competitors if they read a positive ad than a negative ad ($M_{positive} = 2.89$ vs. $M_{negative} = 2.09$).

Purchase Intention The same ANCOVA revealed significant main effects of ad ($F(1,145) = 10.79, p < .001, \eta_p^2 = .069$), and age ($F(1,145) = 5.46, p = .02, \eta_p^2 = .036$), a marginally significant main effect of gender ($F(1,145) = 3.43, p = .07, \eta_p^2 = .023$), and more importantly, a marginally significant interaction of power \times ad ($F(1,145) = 2.87, p = .09, \eta_p^2 = .019$). Planned contrasts indicated that participants who imagined that they were a boss (i.e., high power) expressed greater purchase intention toward Airline A after reading a positive ad ($M_{positive} = 5.10$ vs. $M_{negative} = 3.97, F(1,145) = 12.90, p < .001, d = .75$). Participants who imagined that they were an employee (i.e., low power) had equal purchase intention toward Airline A whether they read a positive or negative ad ($M_{positive} = 4.77$ vs. $M_{negative} = 4.41, F(1,145) = 1.21, p = .27$) (Fig. 2).

Attribution The same ANCOVA on attribution revealed significant main effects of ad ($F(1,145) = 7.09, p = .01, \eta_p^2 = .047$) and gender ($F(1,145) = 4.20, p = .04, \eta_p^2 = .028$), as well as the predicted significant interaction between power and ad ($F(1,145) = 5.26, p = .02, \eta_p^2 = .035$). Planned contrasts confirmed that high power participants made more positive attributions toward the advertiser after reading a positive ad ($M_{positive} = 4.37$ vs. $M_{negative} = 3.41, F(1,145) = 12.78, p < .001, d = .74$), and low power participants made similar and more neutral attributions toward the advertiser for both message frame conditions ($M_{positive} = 3.98$ vs. $M_{negative} = 3.91, F(1,145) < 1$).

Mediation To examine the process, a mediated-moderation analysis was conducted ([12]; Model 8; bootstrapped with 10,000 draws). As predicted, there was a conditional indirect

Fig. 2 Experiment 2: purchase intention



effect of ad through attribution on purchase intention with a 95% confidence interval excluding zero (95% CI .11 to 1.26). Specifically, attribution mediated purchase intention for Airline A when power was high (95% CI .28, 1.20), but not when power was low (95% CI $-.35, .43$). This analysis supported our expectation that power moderates the impact of ad on purchase intention, and this effect is driven by advertiser attribution when individuals feel more (vs. less) powerful.

5.5 Discussion

In addition to provide converging and causal evidence for H1, this study also provides process evidence that the effect of power and message framing on judgments is mediated by attributional thinking. Specifically, high power participants made more positive attributions toward the advertiser after reading a positively framed comparative ad than a negatively framed ad, and low power participants made similar and more neutral attributions toward the advertiser for both message frame conditions, supporting H_{2a} and H_{2b}.

6 General Discussion

In the context of comparative advertising, our research shows that the classic framing effect is moderated by the chronic or situationally induced power of the recipient. Higher power individuals are persuaded more by positively framed messages as compared to negatively framed messages, while lower power individuals are equally persuaded by both. In experiment 1, individuals with a higher personal sense of power indicated a higher purchase intention toward the advertised brand after viewing positively-framed comparative ads than negatively framed ones, while individuals with a lower

personal sense of power expressed equal purchase intention across the two types of ads. This moderation was not limited to personal sense of power. In experiment 2, we found that individuals who imagined being in higher power positions were more persuaded by positively framed comparative ads, while individuals imagining themselves in lower power positions were equally persuaded by both. Thus, converging results were obtained for chronic as well as situationally induced power, suggesting that the persuasiveness of positively and negatively framed message depends on power of the individual.

6.1 Contributions and Implications for Practice

To our knowledge, this is the first investigation which theoretically argues *and* empirically shows that (a) power interacts with frame in its effect on persuasion, and (b) people varying in power engage in different levels of attributional thinking, which in turn drives persuasion.

This paper is one of the few that integrates dynamic social processes such as power into the study of cognitive bias. While most cognitive bias research focuses on revealing main effects, or the role of cold cognitive processes such as expertise [7] and cognitive style [38] in moderating the effect, few shed light on more social and dynamic processes such as power. Through showing that power can influence susceptibility to cognitive biases such as the classic framing effect, our research calls for more investigation into the role of dynamic social processes in the study of cognitive biases.

Within the field of power, this research represents an early effort focusing on successful strategies when communicating/interacting with targets of different levels of power. For example, marketers routinely target consumers from different socioeconomic classes, bosses/subordinates, parents/young

children, etc., who vary in their inherent or assumed power. Our findings indicate that when the target is high power consumers, frame is consequential due to the greater scrutiny regarding its intent it might be subjected to. In the process, our research adds to the literature on power which elaborates cognitive, affective, and behavioral tendencies of the powerful and the powerless.

Besides these theoretical and empirical contributions, our results have practical implications in persuading others in negotiations. One popular strategy used in negotiation is to frame a potential course of action as a way to avoid loss as compared to achieve gain. However, the current research on goal framing suggests that the emphasis on loss might not be the best strategy for negotiating when the other party has a higher-power position.

6.2 Limitations and Future Directions

A major limitation of our investigation is that it features limited operationalizations of power. When measuring individual differences in power, we only measured personal sense of power and did not include other related concepts, such as motivation for power. Power motive refers to the extent to which people value having power [30], and it is possible that people with higher power motivation are especially likely to be influenced by the high-power manipulation while resisting the low power motivation. This in turn may have led to a stronger preference for the positively framed message, regardless of the power manipulation. Furthermore, when manipulating power, we only used the imagined hierarchical role manipulation. It is possible that using other manipulations, such as episodic recall (“Write about an experience in which you have power over another person/ another person had power over you”; [36]) may lead to different effects. Last but not least, in the current research, we were not able to tap into the interaction between personal sense of power and social power. Considering that situational power may have different effects on individuals with different levels of personal sense of power (see [24]), a deeper examination of consequences of power should jointly examine personal sense of power and social power. From the viewpoint of a manager, as we states earlier there are several proxies for power that are actionable. Experiment 2 also found a gender effect which broadly supports the possibility that gender may be another power surrogate (men—high power; women—low power).

Another limitation of the current paper is that it establishes a link between power and susceptibility to attribute framing. It will be fruitful to examine the interaction of power and goal framing. The risk framing effect, where risky behaviors are framed either in terms of losses or gains, is well documented [23]. Participants are more risk-seeking when risk is framed as a loss rather than a gain, and there is preliminary evidence that power does not influence this effect [1]. This appears at odds

with our research. One potential source of discrepancy stems from the nature of the decisions. In the Asian disease problem employed by Anderson and Galinsky [1], subjects were asked to make policy decisions for others, with potentially dire consequences such as death. In the current investigation, participants were asked to make everyday decisions, and for themselves. Future research should examine how and whether power influences judgments in situations with more severe consequences, and when the judgment has consequences for the respondent versus others.

Although we provide evidence that attributional thinking drives the effect, our data did not rule out additional mechanisms that might be operating in addition to attribution.¹ For instance, high power individuals may be in a gain seeking mindset and thus may be more persuaded by the positive frame which signals greater sincerity because of its underlying positivity as opposed to the negative frame. Low power people, who may be in a loss avoidance mindset, may not find a positive frame to be more or less compelling. To examine this possibility, it will be important for future research to examine this effect in a context where a gain vs. loss concerns are more clearly on display.

Our finding contracts previous work on framing and self-efficacy. People with high self-efficacy are more persuaded by a loss-framed message (e.g., higher intention to perform skin self-examination) than a gain-framed message while people with low self-efficacy are equally persuaded by losses and gains [41]. It is possible that consumers with high self-efficacy, believing that they have greater control over their own actions and choices, are less oriented toward others. Consequently, they may be less focused on others’ intent resulting in greater message acceptance. On the other hand, high power people, who believe they have control over others’ processes and outcomes, are more other-focused and thus are likely to scrutinize the intent behind the message to a greater extent. This focus may result in defensive processing when the message is perceived as potentially threatening. Future research should examine how self-efficacy and power operate across different message frames.

Finally, our research features comparative messages that were negatively framed or positively framed. These messages

¹ In response to an anonymous reviewer’s suggestion that we conduct a moderated mediation study to explain why positive frames were more persuasive, we ran 3 different studies in March 2020, one each on cereal, coffee, and aspirin comparative ads. Each study was 2 (power: high/low) × 2 (advertiser honesty: high/low) × 2 (comparative ad frame: positive/negative) between subjects. A total of 1166 MTurk participants across these studies were exposed to different manipulations of power, advertiser honesty, and message frame. Unfortunately, we did not find the expected 3-way interaction across any of the studies. One possibility is that the absence of the proposed effects was in part due to the COVID-19 context within which the data was collected. In this scenario, respondents are expressing higher levels of anxiety, sadness, uncertainty, and mortality salience which is a) making it generally difficult to find hypothesized effects, and b) potentially conflating the data. Another possibility is that frame-related suspicion is a partial or one of the potential mediators.

served our purpose, which was to examine the interaction between power and framing, and such messages are used routinely in mainstream media. Nevertheless, framing can and should be investigated in noncomparative advertising settings as well. Such an investigation may be usefully combined with goal framing, accomplishing two tasks simultaneously. Will the attributional mechanism documented in our research replicate in a noncomparative setting? The general principle we exhort researchers to pursue is whether people in high power engage in greater attributional thinking in general, and if so, why?

In conclusion, power despite being a fundamental driver of key aspects of human thought, judgment, and behavior like cognition [17], social action [18], hate crimes [11], and sexual aggression [29] has not enjoyed as much research attention as perhaps it should. Our research attempts to forward a research agenda focused on power and persuasion.

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Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee (Institutional Review Board, University of Washington, Seattle) and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

This article does not contain any studies performed on animals by the authors.

Appendix 1. Negative frame

Headline: “Now J. D. Power and Associates validates what we have been saying all along... It makes less sense to fly Airline B as compared to Airline A.”

Ad copy: “When J.D. Power Associates recently published the results of their flight satisfaction survey, we at Airline A were not taken by surprise. We have been claiming all along that Airline B is worse than Airline A on both on-time performance as well as in-flight amenities!”

Now you have proof.²

What does this mean to valued consumers like you?

² J.D. Power and Associates customer satisfaction index based on a survey of 6800 fliers (100 represents the industry average, higher numbers are better):

Airline	On-time performance	In-flight amenities
A :	110	107
B :	97	98

(J. D. Power Associates is an independent marketing information firm based in Agoura Hills, California)

Flying Airline B as compared to Airline A means more of those endless, frustrating waits for you and those expecting you at your destination. It also means not being on time for your appointments, and more missed flights.

Flying Airline B as compared to Airline A also means worse in-flight service and less legroom. So you arrive more tired and less refreshed.

Fly Airline A. The proven performer!

Appendix 2. Positive frame

Headline: “Now J. D. Power and Associates validates what we have been saying all along... It makes more sense to fly Airline A as compared to Airline B.”

Ad Copy: “When J.D. Power Associates recently published the results of their flight satisfaction survey, we at Airline A were not taken by surprise. We have been claiming all along that Airline A is better than Airline B on both on-time performance as well as in-flight amenities!”

Now you have proof.³

What does this mean to valued consumers like you?

Flying Airline A as compared to Airline B means fewer of those endless, frustrating waits for you and those expecting you at your destination. It also means being on time for your appointments, and fewer missed flights. Flying Airline A as compared to Airline B also means better in-flight service and more legroom. So you arrive less tired and more refreshed.

Fly Airline A. The proven performer!

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³ J.D. Power and Associates customer satisfaction index based on a survey of 6800 fliers (100 represents the industry average, higher numbers are better):

Airline	On-time performance	In-flight amenities
A :	110	107
B :	97	98

(J. D. Power Associates is an independent marketing information firm based in Agoura Hills, California)

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