

Dynamics of Communicator and Audience Power: The Persuasiveness of Competence versus Warmth

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The current research offers a new theoretical perspective on the relationship between power and persuasion. An agentic-communal model of power is presented that proposes power affects both the messages generated by communicators and the messages that persuade audiences. Compared to low-power states, high-power states produce a greater emphasis on information that conveys competence. As a consequence, high-power communicators generate messages with greater competence information, and high-power audiences are persuaded more by competence information. In contrast to high-power states, low-power states produce a greater emphasis on information that conveys warmth. As a result, low-power communicators generate messages with greater warmth information, and low-power audiences are persuaded more by warmth information. Because of these two outcomes, a power-matching effect occurs between communicator and audience power: high-power communicators are more effective in persuading high-power audience members, whereas low-power communicators are more effective in persuading low-power audience members. Four experiments find support for these effects in oral and written contexts with three distinct manipulations of power. Overall, these experiments demonstrate that the persuasiveness of messages can be affected by the alignment between the psychological sense of power of the communicator and the audience.

Keywords: power, persuasion, agentic-communal, warmth, competence

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What is the role of psychological power in the persuasion process? Recent research suggests a simple answer: those with power are more persuasive than those without power. For example, interviewees who reflected on possessing power were more persuasive in a mock interview compared to interviewees who reflected on lacking power (Lammers et al. 2013). This straightforward answer becomes less convincing when one considers the finding that relatively powerless children can deliver certain forms of protective messages more effectively than adults (Pratkanis and Gliner 2004). Similarly, HIV/AIDS-preventive health messages have been found to be effective when conveyed by low-income individuals as opposed to highly ranked officials (Sachs 2005). So, which is it: Are the powerful more persuasive than the powerless or vice versa?

The present work tackles this question by offering insight into initial conditions under which the powerful

versus the powerless are more persuasive. We propose that having or lacking power may change the diagnosticity of information (Feldman and Lynch 1988) and thus the extent to which information is used or relied upon. We argue that psychological states of *high power* lead communicators to favor the use of competence-related arguments and audiences to rely more heavily on competence information when forming their attitudes. In contrast, psychological states of *low power* lead communicators to favor the use of warmth-related arguments and audiences to rely more heavily on warmth information in forming their attitudes. As a consequence of these independent effects, the success of a persuasive message can hinge on the interaction between communicator and audience power. High-power communicators generate messages that persuade high-power audiences; low-power communicators generate messages that persuade low-power audiences.

Before developing our hypotheses further, we elaborate on the construct of power.

POWER AND ITS EFFECTS ON COMMUNICATORS AND AUDIENCES

Power is defined as asymmetric control over valued resources in social relationships (Magee and Galinsky 2008; Rucker, Galinsky, and Dubois 2012). Researchers have studied power as a psychological state or mindset that can arise from both structural differences in socioeconomic status (Dubois, Rucker, and Galinsky 2015; Kraus, Piff, and Keltner 2009; Stephens, Markus, and Townsend 2007) as well as situational factors such as one's social role (e.g., boss vs. employee; Anderson and Galinsky 2006). The last decade has witnessed an acceleration of research efforts to unpack power's far-reaching effects on consumer behavior (Dubois, Rucker and Galinsky 2012; Rucker et al. 2012). However, to date, scant evidence exists as to how power systematically affects the creation and reception of persuasive messages. The little work that does exist can be broken into research focused on understanding the effects of power on communicators (i.e., those delivering a message) or on audiences (i.e., those receiving a message).

With regard to communicators, having power increases communicators' attempts to influence others (Kipnis 1972) and to express one's own opinion in groups (Anderson and Berdahl 2002; Galinsky et al. 2008). As noted, Lammers et al. (2013) found that individuals primed with high power were more persuasive than those primed with low power. Furthermore, a communicator's power can enhance persuasion by serving as a simple heuristic (Petty, Cacioppo, and Goldman 1981) and thus induce greater compliance in an audience (Cialdini 2009).

With regard to audience power, Briñol and colleagues (2007) found that an audience's psychological power affected their response to persuasion in two distinct ways. First, increasing an audience's power prior to receiving a message led to less scrutiny of the message and therefore a weaker discrimination between weak and strong arguments. Second, when the audience's power was increased after a message, they became more confident in their message-related thoughts. As a consequence, powerful individuals were more likely to use those thoughts in forming an opinion on the topic, which led to more positive attitudes after strong arguments but more negative attitudes after weak arguments. Although Briñol et al. (2007) examined audience power, they did not manipulate communicator power.

Beyond these few examples, the relationship between power and persuasion remains relatively unexplored. The knowledge accumulated so far suggests a simple main effect: high-power communicators are more persuasive than low-power communicators. In contrast to this idea, we introduce the notion that power can fundamentally shape the value or diagnosticity of information and thus the type of information communicators convey and that audiences give weight to. Consequently, high- or low-power communicators may be more or less persuasive depending on whether they are communicating to an audience in a state of high or low power.

AN AGENTIC-COMMUNAL MODEL OF POWER: IMPLICATIONS FOR WARMTH VERSUS COMPETENCE INFORMATION

Agency, Communion, and Power

Bakan (1966) introduced the ideas of *agency* and *communion* to reflect two fundamental modalities of human thought and behavior. Agency is marked by a focus on the self and produces consequences such as independence and personal striving. In contrast, communion focuses people on others and enhances individuals' attention to getting along with others and others' needs. Rucker et al. (2012; also Rucker, Dubois, and Galinsky 2011; Rucker and Galinsky 2015, 2016) proposed an agentic-communal model of power by which power affects people's orientation toward the world in an agentic or communal fashion; high power fosters an agentic orientation and low power fosters a communal orientation. Because the powerful are less dependent on others, they can pursue their own goals and interests with fewer constraints (i.e., they are imbued with agency). In contrast, the dependency of the powerless requires them to attend to and incorporate others to achieve their goals (i.e., they require communion).

One aspect of agentic and communal orientations is that they appear to relate to competence and warmth information, respectively (Asch 1946; Cuddy, Fiske, and Glick

2004; Ybarra, Chan, and Park 2001; also Cuddy, Fiske, and Glick 2008; Fiske, Cuddy, and Glick 2007; Judd et al. 2005). We propose that an agentic orientation focuses people's attention on information that relates to others' capabilities with respect to the skillfulness, efficacy intelligence, and confidence attached to a target (i.e., competence). Conversely, we propose that a communal orientation focuses people's attention on information associated with how good natured, trustworthy, tolerant, friendly, and sincere a target is perceived to be (i.e., warmth). Although both competence and warmth are important dimensions of daily interactions, our hypothesis suggests that power shifts the balance in terms of how concerned people are with each dimension.

The constructs of warmth and competence potentially offer insights into how power fundamentally affects persuasion. In particular, as described next, drawing on the accessibility-diagnostics perspective (Feldman and Lynch 1988), we posit that both audience and communicator power affect the diagnosticity of warmth and competence information and thus the extent that warmth and competence information is used when generating and assessing message arguments.

The Accessibility-Diagnostics Perspective

In a seminal article, Feldman and Lynch (1988) distinguish between two dimensions of attitude formation: the extent to which an individual readily and easily retrieves a piece or type of information (hereafter, accessibility) and the

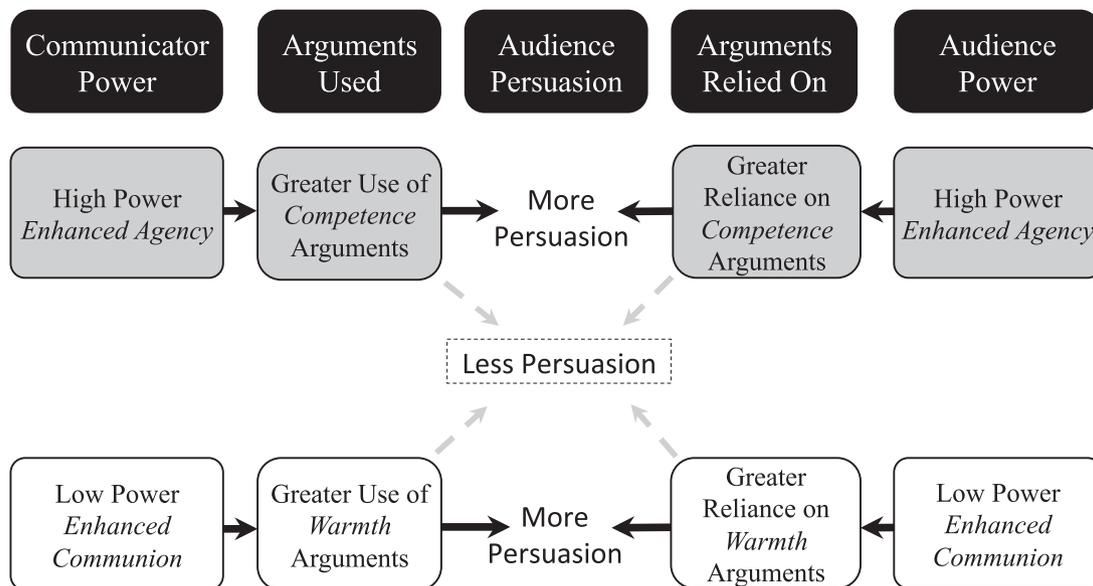
extent to which an individual finds a piece or type of information relevant for the task at hand (hereafter, diagnosticity). A core principle of the accessibility-diagnostics model is that information is more likely to be recruited in a judgment when it is accessible and viewed as diagnostic.

Building on the accessibility-diagnostics perspective, we propose that high-power states can increase the diagnosticity and thus the use of competence-related arguments because of the association between high power and agency. In contrast, because of the association between low power and communion, we propose that low-power states can increase the diagnosticity and thus the use of warmth-related arguments. As a result, when generating messages, high-power communicators are more likely to use competence-related arguments (e.g., stressing skillfulness and intelligence), whereas low-power communicators are more likely to use warmth-related arguments (e.g., stressing friendliness and trustworthiness). In a similar vein, we propose that, when evaluating messages, high-power audiences are more likely to rely on competence-related arguments, whereas low-power audiences are more likely to rely on warmth-related arguments.

As a consequence of these conceptual links, we predict that persuasion can be enhanced when a match exists between communicator and audience power. This outcome is predicated on power leading to both differential generation and reception of competence versus warmth information (figure 1 shows the conceptual model). Of note, in the case of communicators, when given the opportunity to generate a message

FIGURE 1

THEORETICAL MODEL OF THE RELATIONSHIP BETWEEN POWER AND PERSUASION



spontaneously, it is also possible that competence and warmth information may be differentially accessible. In this research, however, we focus on testing and providing evidence for the diagnosticity account.

FORMAL HYPOTHESES

We introduce formal hypotheses regarding a new role of power in the persuasion process. First, we suggest that the relationship between power and persuasion depends on the psychological power of the communicator and the audience. We propose that communicator and audience power interact to affect persuasion with greater persuasion occurring when—unbeknownst to either party—a match exists between the power states of the communicator and the audience. Formally:

H1a: High-power communicators will be more effective at persuading high-power audiences than low-power audiences.

H1b: Low-power communicators will be more effective at persuading low-power audiences than high-power audiences.

Next, we propose that this matching effect occurs because power shifts both the communicator's use and the audience's reliance on competence versus warmth-related arguments. More formally, power shapes the arguments communicators generate, as follows:

H2a: High-power communicators, compared to low-power communicators, are more inclined to generate and select arguments related to competence.

H2b: Low-power communicators, compared to high-power communicators, are more inclined to generate and select arguments related to warmth.

Turning to audiences, we propose that power shapes the arguments that audiences rely on to form their attitudes in the following manner:

H3a: High-power audiences, compared to low-power audiences, are more inclined to rely on competence-related arguments to form their attitudes.

H3b: Low-power audiences, compared to high-power audiences, are more inclined to rely on warmth-related arguments to form their attitudes.

OVERVIEW

Four experiments test our hypotheses. Experiment 1 investigates whether matching communicators' and audiences' psychological state of power enhances persuasion in an oral context. Experiments 2 and 3 examine communicator and audience power in written contexts and test whether this effect can be accounted for by a differential use of warmth or

competence at the communication stage, and a potential differential in reliance on warmth or competence in persuasive messages at the reception stage. Finally, experiment 4 demonstrates that differences in power shift audience's reliance on warmth versus competence information when assessing persuasive messages.

We report all manipulations and any data exclusions in our experiments. Sample sizes were based on subject availability as well as unrelated research projects run in conjunction with these experiments. No additional data were added after analyses. In some experiments we collected additional measures after the key hypothesis-related measures for exploratory purposes. A discussion of these measures is available from the authors upon request.

EXPERIMENT 1: MATCHING COMMUNICATOR AND AUDIENCE POWER

Experiment 1 manipulated both the psychological state of power of the communicator and that of the audience in an oral transmission context. Of central interest was the audience's responsiveness to the message. We placed participants into dyads and instructed one participant to persuade the other to use a gym facility. Although power does not typically affect mood (Briñol et al. 2007; Rucker et al. 2011; Smith and Galinsky 2010; Smith and Trope 2006), we measured and controlled for differences in mood given prior research documents that mood can affect the messages communicators generate (Bohner and Schwarz 1993; Forgas 2006) and whether audiences are persuaded (Labroo and Rucker 2010; Schwarz, Bless, and Bohner 1991).

Participants and Design

A total of 120 business undergraduates (72 women) at a French university participated as part of a classroom academic exercise on persuasion. Participants were randomly assigned to a 2 (communicator power: high vs. low) \times 2 (audience power: high vs. low) between-participants design. Participants were assigned to the role of communicator or audience member (i.e., recipient) in one of four dyads: high-power communicator and high-power audience, high-power communicator and low-power audience, low-power communicator and low-power audience, low-power communicator and high-power audience. Thus each audience member was yoked to a single communicator.

Procedure

All written materials were presented in French. All participants first completed a one-page questionnaire, presented as a cognitive warm-up, which included a scrambled sentences task (Smith and Trope 2006). In reality, this served as the

power manipulation. Next, participants were randomly assigned to the role of communicator or audience member as part of a persuasion exercise conducted over two consecutive sessions. Participants assigned to the role of communicator were told they would be paired with another participant and that their task was to persuade this participant to use the new on-campus gym facilities. Communicators were subsequently given one minute to think individually about what they wanted to say. Participants assigned to the audience condition were informed they would be paired with another participant and would listen to a short speech from that participant.

Next, participants sat down in dyads and the persuasion exercise began. Communicators were given one and a half minutes to convince the audience member to start using a new on-campus gym facility. A timer signaled the beginning and the end of the task. During the persuasion task, neither communicators nor audiences were aware of the power condition they were assigned to, nor were they informed that the warm-up task was meant to induce power. After the persuasive task ended, both communicators and audience members completed a final questionnaire. For audience members, the questionnaire asked them to report how persuasive the communicator was as well as their likelihood of using the new on-campus gym facilities. For both communicators and audience members, the questionnaire contained manipulation checks.

Independent Variables

Power. Both communicators and audience members completed a scrambled sentences priming task (Smith and Trope 2006) containing 16 sets of words. For each set, participants were presented with five words and instructed to make a sentence using four of the five words listed. In the high-power condition, 8 of the 16 sets included a word related to having power (i.e., authority, captain, commands, controls, dominates, executive, influenced, privileged). In the low-power condition, 8 of the 16 sets included a word related to lacking power (i.e., complied, janitor, obey, passive, servant, submits, subordinate, yield).

Communicator/Audience Role. Participants either held the role of communicator (i.e., tried to convince the audience member to start using the new on-campus gym facilities) or audience member (i.e., listened and assessed how convinced they were by the communicator's speech).

Dependent Variables

Communicator Persuasiveness. Audience members reported the extent to which they found the communicator to be convincing and persuasive (anchored at 1 = Extremely unconvincing and 7 = Extremely convincing; and 1 = Extremely unpersuasive and 7 = Extremely persuasive). These two items were averaged to form a persuasion index ($r = .94$).

Likelihood of Using the New Gym Facilities. Audience members reported how likely they would be to start using the new gym facilities on a 7-point scale anchored at 1 = Very unlikely and 7 = Very likely.

Manipulation Checks. At the end of the session, participants answered three questions assessing the extent to which they felt powerful during the persuasion task on 7-point scales anchored at powerless-powerful; without control-in control; weak-strong. Because these items were highly correlated ($\alpha = .92$), they were aggregated into a single power index. In addition, mood was assessed with a 7-point scale anchored at 1 = Sad and 7 = Happy.

Results and Discussion

Manipulation Checks. A two-way analysis of variance (ANOVA) revealed that participants reported feeling significantly less powerful in the low-power condition ($M = 3.59$, $SD = 1.01$) compared to the high-power condition ($M = 4.34$, $SD = 1.41$; $F(1, 116) = 10.83$, $p = .001$, $\eta_p^2 = .08$). Importantly, no main effect of role ($F < 1$) or interaction between power and role was present ($F < 1$), suggesting that participants' experienced power was not affected by whether they were assigned to a role of communicator or audience member. As an additional check of whether our manipulation produced dyads of similar and dissimilar psychological power, we computed the difference score in power between each communicator and each audience member within matching conditions (low-power communicator and low-power audience member; high-power communicator and high-power audience member) and mismatching conditions (low-power communicator and high-power audience member; low-power communicator and high-power audience member). A one-way ANOVA on this difference score revealed that the gap in feelings of power between communicators and audience members was lower in the matching conditions ($M = .64$, $SD = .63$) than in the mismatching conditions ($M = 1.11$, $SD = .82$), $F(1, 58) = 6.08$, $p = .02$, $\eta_p^2 = .09$, further suggesting that our power manipulation produced the intended effect within dyads. Finally, a two-way ANOVA on the mood measure found no main of power, role, or their interaction on participants' mood ($F < 1$).

Communicator Persuasiveness. A two-way ANOVA on the audience's ratings of communicator persuasiveness revealed a significant communicator power \times audience power interaction, $F(1, 56) = 15.81$, $p < .001$, $\eta_p^2 = .22$. No additional effects were found for communicator power or audience power ($F < 1$). High-power communicators were more persuasive when addressing a high-power audience member ($M = 5.03$, $SD = 1.28$) than a low-power audience member ($M = 3.93$, $SD = 1.08$), $F(1, 56) = 5.60$, $p = .02$, $d = .92$). In contrast, low-power communicators were more persuasive when addressing a low-power

audience member ($M = 5.20$, $SD = 1.59$) compared to a high-power audience member ($M = 3.73$, $SD = .94$), $F(1, 56) = 10.32$, $p = .002$, $d = 1.12$).

Likelihood of Using the New Gym Facilities. A two-way ANOVA on audiences' likelihood of going to the gym revealed a significant communicator power \times audience power interaction, $F(1, 56) = 10.84$, $p = .002$, $\eta_p^2 = .16$. No other effects emerged ($F < 1$). High-power communicators were more effective in convincing a high-power audience to use the new gym facilities ($M = 5.00$, $SD = 1.46$) than a low-power audience ($M = 3.80$, $SD = 1.26$), $F(1, 56) = 4.86$, $p = .031$, $d = .87$). In contrast, low-power communicators were more effective in convincing a low-power audience to use the new gym facilities ($M = 5.26$, $SD = 1.83$) compared to a high-power audience ($M = 3.93$, $SD = 1.33$), $F(1, 56) = 6.01$, $p = .01$, $d = .83$).

Experiment 1 offers evidence that persuasion can be a joint function of the psychological state of power of both the communicator and audience in an oral context. Specifically, matching communicator and audience power led to more persuasion (support of hypothesis 1a and hypothesis 1b). Where past findings suggest that high-power communicators are more persuasive than low-power communicators (Kipnis 1972; Lammers et al. 2013), the current experiment demonstrates that both low- and high-power communicators can be more persuasive based on an audience's power mindset. One limitation, however, is that we did not measure whether this matching effect is a result of a differential use of warmth versus competence information. We address this concern in experiment 2.

EXPERIMENT 2: THE MEDIATING ROLE OF WARMTH AND COMPETENCE

Experiment 2 aimed to replicate the findings of experiment 1 in a written context and to provide evidence for the underlying process. Based on our agentic-communal account, high- and low-power states affect the use and reliance on information related to competence and warmth. Because high-power communicators view competence as more diagnostic, they are more likely to use competence in the generation of their arguments; because high-power audiences view competence as more diagnostic, they are more likely to rely on it when forming their attitudes and thus more persuaded by messages from high-power communicators. Conversely, because low-power communicators view warmth as more diagnostic, they are more likely to use warmth in the generation of their arguments; because low-power audiences view warmth as more diagnostic, they are more likely to rely on warmth information when forming their attitudes, and thus they are in turn more persuaded by messages from low-power communicators.

To test this perspective, we assigned independent coders to measure the warmth and competence of the messages

generated by communicators to see if (1) communicators generated messages that differed along these dimensions, and (2) these measures explained the differential persuasion among audiences. We also added baseline conditions for purposes of establishing the locus of the effect. Finally, we examined message length to test whether the effect of communicator power on persuasion stems from changes in message format, as opposed to message content.

Participants and Design

A total of 360 students at Northwestern University (173 men) were assigned to a 3 (communicator power: baseline, low, high) \times 3 (audience power: baseline, low, high) between-participants design. Each audience member was yoked to a single communicator and only saw that one message, yielding 180 observations on the key measure of audience attitudes.

Procedure

We manipulated power using an episodic recall task. Participants were subsequently assigned to either the role of communicator or audience member.

In the communicator sessions, participants were instructed to write a persuasive message promoting their university to prospective students. Specifically, participants were told:

Imagine that you have been chosen by the dean's office to promote your university at several top high-schools in the country. We would like you to write a persuasive speech promoting your university, as if you were to try to convince an audience to apply to your university.

In the audience sessions, participants were randomly presented with a message generated by a previous participant in the high-power, low-power, or baseline condition. Neither audiences nor communicators were aware of the power condition of the other. Finally, we asked audiences to provide their attitude toward the target stimuli.

Independent Variables

Power. Power was manipulated by having participants write about a time they had or lacked power (Galinsky, Gruenfeld, and Magee 2003). Participants in the baseline condition were asked to recall the last time they went to the grocery store (Rucker and Galinsky 2008).

Dependent Variables

Attitudes Toward the University. Participants in the audience condition responded to three 7-point scales to assess their attitudes toward the university. The scales were anchored at the end points bad-good, unfavorable-favorable, negative-positive (Petrocelli, Tormala, and Rucker 2007)

TABLE 1

INTERCODER RELIABILITY BY DIMENSION, EXPERIMENT 2

Dimension	Pearson r (dimensions assessing message)
Capable	.901
Skillful	.866
Intelligent	.846
Confident	.916
Good natured	.904
Trustworthy	.848
Tolerant	.861
Friendly	.851
Sincere	.871

and combined to form a single measure of attitudes ($\alpha = .94$).

Message Content. We asked two coders blind to the hypotheses to code the messages generated by the communicators on two dimensions aggregated into two indices: competence (four items: capable, skillful, intelligent, confident, $\alpha = .88$) and warmth (five items: good natured, trustworthy, tolerant, friendly, sincere, $\alpha = .89$; Cuddy et al. 2008) conveyed by the message. All items were assessed on 7-point scales, and discrepancies between coders were addressed through discussion (table 1 shows intercoder reliability by dimension). Finally, we accounted for message length via counting the number of words.

Manipulation Checks. At the end of the experiment, we included questions to assess the extent to which the essay made participants feel powerful on 7-point scales anchored at powerless-powerful; without control-in control; weak-strong. We aggregated these measures into a single power index ($\alpha = .90$).

Results and Discussion

Manipulation Checks. A two-way ANOVA (power and role) on the power index revealed only a main effect of power. Participants felt significantly less powerful in the low-power condition ($M = 2.81$, $SD = 1.10$) compared to the baseline condition ($M = 3.47$, $SD = 1.20$) and high-power condition ($M = 4.49$, $SD = 1.52$, $F(2, 354) = 51.71$, $p < .001$, $\eta_p^2 = .22$), suggesting the power manipulation was successful. Neither the main effect of role, $F(1, 354) = 1.25$, $p = .26$, $\eta_p^2 = .004$, nor the interaction between power and role was significant, $F(2, 354) = 1.19$, $p = .30$, $\eta_p^2 = .007$. Post hoc tests revealed that participants felt significantly more powerful in the high-power condition compared to both the baseline condition, $F(1, 357) = 37.49$, $p < .001$, $d = .74$, and the low-power condition, $F(1, 357) = 101.88$, $p < .001$, $d = 1.26$. In addition, low-power participants felt significantly less powerful than baseline participants $F(1, 357) = 15.76$, $p < .001$, $d = .57$.

As in experiment 1, playing the role of communicator or audience member did not affect participants' sense of power.

Audience Attitudes. We submitted participants' attitude index to a 3 (communicator power) \times 3 (audience power) ANOVA.

A marginal main effect of communicator power emerged, $F(2, 171) = 2.95$, $p = .055$, $\eta_p^2 = .03$. High-power communicators ($M = 4.44$, $SD = 1.39$) were more persuasive than baseline communicators ($M = 3.88$, $SD = 1.16$), $F(1, 171) = 5.88$, $p = .01$, $d = .43$) but did not differ from low-power communicators ($M = 4.18$, $SD = 1.35$), $F(1, 171) = 1.27$, $p = .26$, $d = .18$. Low-power communicators did not significantly differ from baseline communicators, $F(1, 171) = 1.68$, $p = .19$, $d = .23$. No effect of audience power on audience attitudes emerged ($F < 1$) (figure 2).

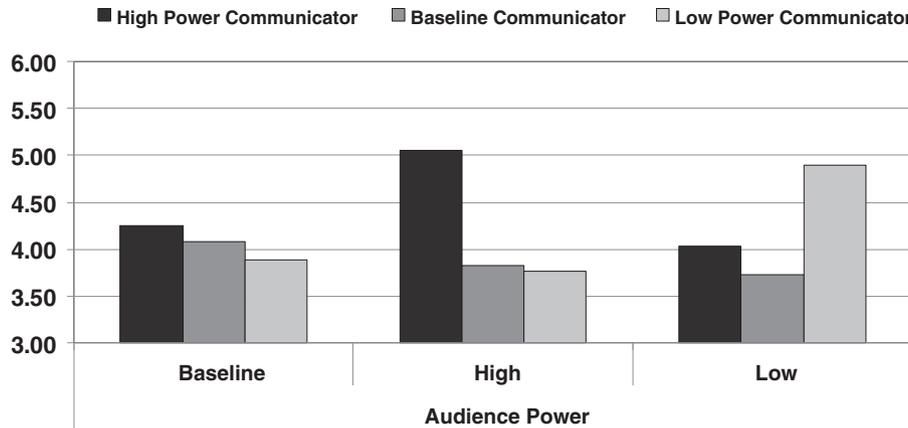
Of central importance, a significant communicator power \times audience power interaction emerged, $F(4, 171) = 4.28$, $p = .003$, $\eta_p^2 = .09$, which we decomposed by audience type. First, among high-power audiences, a main effect of communicator power emerged, $F(2, 57) = 5.88$, $p = .005$, $\eta_p^2 = .17$; high-power communicators persuaded high-power audiences more effectively ($M = 5.05$, $SD = 1.62$) than both baseline communicators ($M = 3.83$, $SD = 1.21$, $F(1, 57) = 8.34$, $p = .005$, $d = .85$) and low-power communicators ($M = 3.76$, $SD = 1.10$, $F(1, 57) = 9.28$, $p = .003$, $d = .93$). High-power communicators did not differ statistically in persuading low-power and baseline communicators, $p = .87$, $d = .06$. Among low-power audiences, a main effect of communicator power occurred, $F(2, 57) = 4.37$, $p = .01$, $\eta_p^2 = .13$; low-power communicators produced greater persuasion ($M = 4.90$, $SD = 1.50$) than both baseline communicators ($M = 3.73$, $SD = 1.11$, $F(1, 57) = 8.11$, $p = .006$, $d = .88$) and high-power communicators ($M = 4.03$, $SD = 1.21$, $F(1, 57) = 4.47$, $p = .039$, $d = .65$), while no difference was present between high-power and baseline audiences ($p = .46$). Among baseline audiences, communicator power did not affect attitudes ($F < 1$).

Overall, high-power communicators persuaded high-power audiences more effectively than low-power audiences (hypothesis 1a). In contrast, low-power communicators persuaded low-power audiences more effectively than high-power audiences (hypothesis 1b).

Message Competence. Judges rated high-power communicators as delivering messages conveying greater competence ($M = 4.71$, $SD = 1.56$) than both baseline ($M = 3.91$, $SD = 1.34$; $F(1, 177) = 10.23$, $p = .002$, $d = .55$) and low-power communicators ($M = 3.74$, $SD = 1.12$; $F(1, 177) = 15.12$, $p < .001$, $d = .71$). Message ratings between the baseline and low-power communicators did not differ, $p = .69$. These findings support hypothesis 2a.

FIGURE 2

COMMUNICATORS' PERSUASIVENESS AS A FUNCTION OF AUDIENCE POWER AND COMMUNICATOR POWER, EXPERIMENT 2.



Message Warmth. Judges rated low-power communicators as delivering messages conveying more warmth ($M = 4.73$, $SD = 1.36$) than both baseline ($M = 3.52$, $SD = 1.02$; $F(1, 177) = 34.59$, $p < .001$, $d = 1.00$) and high-power communicators ($M = 3.83$, $SD = .98$; $F(1, 177) = 19.21$, $p < .001$, $d = .76$). Message ratings between baseline and low-power communicators did not differ ($p = .13$). Together, these findings support hypothesis 2b.

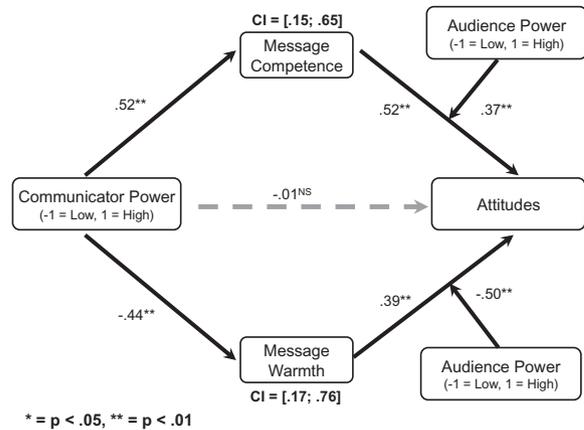
Length. Number of words did not vary as a function of communicator power ($F < 1$).

Mediation Analyses. We tested whether the effect of communicator power on persuasion was mediated by message competence and/or warmth, and whether these potential mediating paths were moderated by audience power (Hayes 2013, model 14; figure 3). Given our theoretical model, and specific hypotheses, we focused on the high- and low-power conditions. We coded high power as 1 and low power as -1.

First, replicating the ANOVA results, we found that communicator power predicted message competence ($\beta = .52$, $t(78) = 3.42$, $p = .001$) and message warmth ($\beta = -.44$, $t(78) = 3.19$, $p = .002$). Next, a comprehensive regression predicting persuasion from communicator power, audience power, the two mediators (message competence and message warmth) and their interaction with audience power revealed a main effect of message competence ($\beta = .52$, $t(73) = 8.12$, $p < .001$) and message warmth ($\beta = .39$, $t(73) = 5.41$, $p < .001$). Of central importance, both the audience power \times message competence ($\beta = .37$, $t(73) = 7.35$, $p < .001$) and audience power \times message warmth ($\beta = -.50$, $t(73) = 6.22$, $p < .001$) interactions were significant, suggesting the presence of moderated mediation. Supporting this proposition, the index of

FIGURE 3

MEDIATION THROUGH WARMTH AND COMPETENCE JUDGMENTS, EXPERIMENT 2.



moderated mediation was significant for both warmth (95% [CI], .17–.76) and competence (95% CI, .15–.65; figure 3 shows complete path coefficients) confidence intervals. No other significant effect or interaction emerged ($p > .16$). Together, these results indicate that high-power communicators, compared to low-power communicators, used more competence-related arguments, and that messages with competent arguments were more persuasive among high-power audiences than among low-power audiences. In contrast, low-power communicators, compared to high-power communicators, used more warmth-related arguments, and messages with warm arguments were more persuasive among low-power audiences than among high-power audiences.

Overall, this study replicated the power-matching effect obtained in experiment 1 in a written context. We also found evidence consistent with our proposed account of the process: at the communication stage, having power led communicators to emphasize greater competence, whereas lacking power led communicators to emphasize greater warmth. At the reception stage, audiences in a state of high power were more persuaded by competence-based messages than warmth-based messages. In contrast, audiences in a state of low power were more persuaded by warmth-based messages than competence-based messages. Together, these accounts are consistent with the general idea that both communicators and audiences place differential diagnosticity on warmth/competence as a function of power.

EXPERIMENT 3: DIFFERENTIAL DIAGNOSTICITY OF WARMTH AND COMPETENCE

In prior experiments, communicators generated their own messages, which introduces two limitations. First, it is possible that the messages generated varied in content beyond warmth and competence. Second, it is possible that beyond viewing competence and warmth as more diagnostic, communicators drew on this information because it was more accessible. Experiment 3 aimed to address these issues by having communicators construct messages from a pool of arguments preselected to vary in warmth and competence, but not other dimensions such as valence or abstractness.

We expected high-power communicators to select a greater number of competence-related arguments but low-power communicators to select a greater number of warmth-related arguments. In turn, we expected a high-power audience to be more persuaded by messages with competence-related arguments but a low-power audience to be more persuaded by messages with warmth-related arguments. Having communicators choose arguments helped us to better isolate the importance of message content related to warmth and competence. In addition, holding the accessibility constant (i.e., everyone read and selected a subset of arguments from the same pool) allowed us to better isolate diagnosticity on the part of communicators.

EXPERIMENT 3 PRETEST

Sixty-two participants (35 women) from the Paris metropolitan area took part in a laboratory session. Participants were recruited through the use of flyers and online advertising and were compensated €12 for an hour. As part of a larger experimental session, participants were exposed to 18 arguments about a restaurant (appendix 1). Nine of the arguments were designed to consist of information primarily associated with warmth, whereas nine of the arguments were designed to consist of information primarily associated with

competence. The order of the arguments was counterbalanced. Warm arguments emphasized communal aspects of the restaurant and the disposition of the staff (e.g., “The chef’s friendly reputation makes this restaurant very inviting”; “You will find very amiable sommeliers able to assist you in your choice of wine”). In contrast, competent arguments focused more on skills and abilities associated with the restaurant (e.g., “The chef has built a reputation based on his skills and competence”; “You will find capable sommeliers able to assist you in your choice of wine”; the appendix provides the full list of arguments). Note that arguments, as with all materials in this experiment, were presented originally in French.

For each argument, participants were presented with a series of adjectives and asked on a 7-point scale whether they endorsed the adjective as associated with the statement (i.e., “To what extent does this statement convey ___?” on a scale from 1 = Not at all to 7 = Extremely). Participants were presented with two items to assess perceived warmth (warmth, trustworthiness) and two items to assess perceived competence (competence, skillfulness). In addition, we included two items to assess action orientation (action, passivity; the second item was reverse-coded prior to data analysis), and two items to assess abstraction (abstraction, concreteness; the second item was reverse-coded prior to data analysis). Last but not least, we assessed the persuasiveness of each statement, through two items (how persuasive/convincing is this argument to you?). The items designed to assess warmth ($r = .81$, $p < .001$), competence ($r = .83$, $p < .001$), action orientation ($r = .73$, $p < .001$), abstraction ($r = .82$, $p < .001$), and persuasion ($r = .84$, $p < .001$) were correlated, and thus we averaged them to construct five independent indices.

Next, we performed a series of repeated-measures ANOVAs to examine participants’ perceptions of the arguments’ warmth and competence with two factors: argument type (i.e., warmth vs. competence) and argument dimension (i.e., the repeated measure assessing the target dimension of warmth vs. competence). These analyses revealed that, as a whole, the warm and competent arguments differed in warmth and competence but did not differ in abstraction, action orientation, abstraction, or persuasiveness (table 2).

MAIN EXPERIMENT

Participants and Design

A total of 160 participants (96 women) from the Paris metropolitan area were randomly assigned to a 2 (communicator power: high vs. low) \times 2 (audience power: high vs. low) between-participants design as part of laboratory sessions. They were recruited through the use of flyers and online advertising and were compensated €12 for an hour. As in prior experiments, we used a yoked design where low- or high-power audiences were given a message for a restaurant composed by a low- or high-power communicator. However, unlike prior experiments, instead of generating

TABLE 2

RESULTS OF REPEATED-MEASURES ANOVAS ON EACH DIMENSION OF THE PRETEST WITH TWO FACTORS: ARGUMENT TYPE (I.E., WARM VS. COMPETENT); AND ARGUMENT DIMENSION (I.E., THE REPEATED MEASURE ASSESSING THE TARGET DIMENSION), PRETEST EXPERIMENT 3

Dimension	Warm arguments (9 items)	Competent arguments (9 items)	Test
Warmth	$M = 4.77$, $SD = 1.44$	$M = 2.95$, $SD = 1.32$	$F(1, 61) = 427.75$, $p < .001$, $\eta_p^2 = .87$
Competence	$M = 2.87$, $SD = 1.34$	$M = 4.70$, $SD = 1.43$	$F(1, 61) = 409.21$, $p < .001$, $\eta_p^2 = .87$
Action orientation	$M = 3.94$, $SD = 1.76$	$M = 3.84$, $SD = 1.74$	$F(1, 61) = 1.119$, $p = .29$, $\eta_p^2 = .02$
Abstraction	$M = 4.02$, $SD = 1.49$	$M = 4.15$, $SD = 1.65$	$F(1, 61) = 1.80$, $p = .19$, $\eta_p^2 = .03$
Persuasiveness	$M = 4.18$, $SD = 1.51$	$M = 4.17$, $SD = 1.61$	$F(1, 61) = .010$, $p = .92$, $\eta_p^2 = .00$

NOTE.— None of the analyses revealed a significant effect of argument dimension, or a significant argument dimension \times argument type interaction; the F tests reported are all main effects of argument type.

their own arguments, communicators selected arguments from the list developed in our pretest.

Procedure

We conducted two types of lab sessions: one in which participants were assigned to the role of a communicator and another in which participants were assigned to the role of an audience member. Regardless of the type of session, participants' power was manipulated first by assigning them to a role of boss or employee (Anderson and Berdahl 2002; Galinsky et al. 2003). Participants were told they would either serve as a boss in charge of employees (high power) or as an employee who would follow the orders of a boss (low power) in a task that would occur later in the experimental session. All written materials were presented in French.

Participants in the communicator condition were instructed to design a persuasive message by picking out 6 arguments from the list of the 18 arguments from our pretest. Participants in this condition were told that their goal was to compose a message for a restaurant by selecting the most persuasive arguments from the list. Participants assigned to the audience condition were randomly presented with a message from a low- or high-power communicator in a subsequent lab session. As in prior experiments, audiences were unaware of communicators' power and vice versa. Participants in the audience condition then provided their attitude toward the restaurant. Finally, at the end of the experimental session all participants were thanked and debriefed. All materials were presented in French.

Independent Variables

Communicator and Audience Power. The power manipulation for both communicators and audiences was identical and consisted of assigning participants to a role of boss or employee for a subsequent task. Participants first completed a leadership questionnaire and were told that they would be

assigned to a role as part of a group task, on the basis of their answers to the questionnaire as well as the experimenter's observation of their nonverbal behaviors. Participants in the *high-power condition* were given a written description of their role that read as follows (translated from French):

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 in a private questionnaire—that is, the employees never see your evaluation. The employees have no opportunity to evaluate you.

In contrast, participants in the *low-power condition* read (translated from French):

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, 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.

Manipulation Checks. At the end of the experiment, we assessed the extent to which the participants' assigned role made them feel powerful on 7-point scales anchored at powerless-powerful; without control-in control; weak-strong; $\alpha = .91$).

Dependent Variables

Communicator's Choice and Rank of Statements. We dummy-coded the arguments used (Competent = 1; Warm = 0) and then summed across all six arguments

chosen. This approach yielded a measure of the number of competent arguments used by participants and thus the overall degree of competence (vs. warmth) emphasized in the message. This measure could range from 0 (i.e., no competent arguments and all warm arguments) to 6 (i.e., all competent arguments and no warm arguments). In addition, we examined the order in which communicators placed their statements within their message. Research on primacy effects in persuasion suggests that communicators might sometimes place statements they value earlier in their message, especially in a scenario where they are encouraged to invest resources into constructing the message (Haugtvedt and Wegener 1994), such as ours. To confirm this intuition, we asked 25 individuals from the same population to imagine they had to craft a persuasive message composed of six arguments, one of which was stronger than all others. They were then asked to report where they would place this argument: 68% chose to rank it first (17 of 25), 4% second (1 of 25), 12% third (3 of 25), 4% fourth (1 of 25), 0% fifth (0 of 25), and 12% sixth (3 of 25), $\chi^2(5) = 41.96$, $p < .001$.

Audience Attitudes. Participants assigned to the audience condition were asked to report their attitudes toward the message topic using the same three items as in experiment 2 bad-good; unfavorable-favorable; negative-positive; $\alpha = .94$).

Results and Discussion

Manipulation Checks. A two-way ANOVA on the power index revealed participants felt significantly less powerful in the low-power condition ($M = 3.53$, $SD = 1.31$) than in the high-power condition ($M = 4.66$, $SD = 1.41$, $F(1, 156) = 27.33$, $p < .001$, $\eta_p^2 = .14$). No effect of communicator versus audience role or a power \times role interaction was present ($F < 1$), suggesting that participants' power did not depend on whether they were assigned to the communicator or audience condition.

Communicator's Choice and Rank of Statements. A one-way ANOVA on the number of competent arguments used revealed a main effect of power, $F(1, 78) = 38.78$, $p < .01$, $\eta_p^2 = .33$; high-power communicators selected more competent arguments ($M = 3.57$, $SD = 1.17$) than low-power communicators ($M = 2.00$, $SD = 1.38$). As a group, high-power communicators used 143 competent arguments and 97 warm arguments. This pattern was reversed among low-power communicators, who used 80 competent arguments and 160 warm arguments, $\chi^2(1) = 32.19$, $p < .001$. In fact, compared to a possible balanced distribution of 120 warm statements and 120 competent statements, a state of high power significantly increased communicators' likelihood to use competent statements $\chi^2(1) = 4.07$, $p = .03$, whereas a state of low power significantly increased communicators' likelihood to use warm statements, $\chi^2(1) = 13.03$, $p = .01$. Overall,

high-power (low-power) communicators used a significantly greater number of competent (warm) statements than predicted by chance.

In addition, a one-way ANOVA on the average ranking of competent statements, where lower numbers reveal earlier placement, yielded a main effect of communicator power, $F(1, 74) = 7.48$, $p = .008$, $\eta_p^2 = .09$. High-power communicators placed competent arguments earlier ($M = 3.18$, $SD = .69$) than low-power communicators did ($M = 3.74$, $SD = 1.08$). In contrast, a one-way ANOVA on the average ranking of warm statements revealed a tendency, albeit nonsignificant ($F(1, 74) = 2.27$, $p = .12$, $\eta_p^2 = .03$), to place warm arguments earlier among low-power communicators ($M = 3.44$, $SD = .68$) than among high-power communicators ($M = 3.74$, $SD = 1.04$).

Audience Attitudes. A two-way ANOVA on the audience's attitudinal index revealed a significant interaction, $F(1, 76) = 12.40$, $p = .001$, $\eta_p^2 = .14$. High-power communicators were more effective at persuading high-power audiences ($M = 4.48$, $SD = 1.49$) compared to low-power audiences ($M = 3.56$, $SD = 1.31$), $F(1, 76) = 4.69$, $p = .034$, $\eta_p^2 = .06$. In contrast, and again replicating the prior experiments, low-power communicators persuaded low-power audiences more effectively ($M = 4.86$, $SD = 1.78$) than high-power audiences ($M = 3.48$, $SD = 1.19$), $F(1, 76) = 7.92$, $p = .006$, $\eta_p^2 = .09$.

Mediation. To test the role of communicators' choice of warm and competent arguments in audience's attitudes toward the restaurant, we used a moderated mediation analysis (Hayes 2013, model 14). Low-power communicators were coded as -1 , and high-power communicators were coded as 1 . Our mediator consisted of the number of competent arguments in each message. Specifically, this measure could range from 0 (all warm arguments and no competent arguments) to 6 (all competent arguments and no warm arguments) and reflected the extent to which communicators used competent versus warm arguments (i.e., number of competent arguments = 6 - number of warm arguments).

We found that communicator power predicted the number of competent arguments, such that high-communicator power was associated with the use of more competent arguments in a message ($\beta = .79$, $t(78) = 6.23$, $p < .001$). Next, a simultaneous regression predicting persuasion from communicator power, audience power, and the mediator (i.e., number of competent arguments) found a significant audience power \times number of competent arguments interaction ($\beta = .81$, $t(75) = 8.64$, $p < .001$). Moreover, as an index of moderated mediation, we computed whether the number of competent arguments mediated persuasion at each level of audience power. This analysis revealed that the number of competent arguments successfully explained the difference in persuasion among both low-power (95% CI, -1.08 to $-.48$) and high-power audiences (95% CI,

.33–.83). The positive and negative CIs further reflect the nature of these effects: low-power audiences were more persuaded as the number of arguments slanted toward warmth; high-power audiences were more persuaded as the number of arguments slanted toward competence.

Experiment 3 provides additional evidence for our hypothesis that differences in message warmth and competence underlie the power-matching effect. Unlike prior experiments where communicators generated arguments that might have varied on additional dimensions, we find power caused communicators to select differentially among arguments designed primarily to vary in competence and warmth. High-power communicators picked a greater number of competent arguments when crafting their message, but low-power communicators picked a greater number of warm arguments (in support of hypotheses 1a and 1b). This suggests a difference in potential diagnosticity because we held accessibility constant by giving everyone access to the same arguments. Furthermore, audiences appeared to rely differentially on the selection of warm versus competent arguments (in support of hypotheses 2a and 2b) because the amount of persuasion that occurred was linked to the type of argument present.

EXPERIMENT 4: AUDIENCE POWER AND MESSAGE DIAGNOSTICITY

Experiment 4 tested whether power affects perceptions of the diagnosticity of warmth versus competence information. Because our emphasis was on understanding why audiences were persuaded by competent versus warm arguments, we did not manipulate communicator power but manipulated message type directly. That is, we assigned all participants to be an audience member and assessed the perceived diagnosticity of messages that emphasized either warmth or competence. In addition, the experiment aimed to examine whether our findings might be explained by the audience's feelings of similarity with the communicator. For example, perhaps audiences make inferences about the source of the message based on seeing information that they themselves value, and thus persuasion is more a result of inferences about the communicator than properties of the message itself. To test this alternative perspective, we included a measure of similarity.

Participants and Design

A total of 101 participants (55 women) from the Paris area were randomly assigned to a 2 (audience power: high vs. low) \times 2 (message type: competent vs. warm) between-participants design in a laboratory session.

Procedure

All written materials were presented in French. We first manipulated power among participants and presented them

with either warm or competent messages about a restaurant using arguments adapted from the pretest from experiment 3. Next, in addition to measuring participants' attitudes, we measured how diagnostic they viewed each argument given. We hypothesized that low-power individuals would rate warmth-related messages as more diagnostic than competence-related messages and high-power individuals would rate competence-related messages as more diagnostic than warmth-related messages.

Independent Variables

Audience Power. Low- and high-power states were manipulated through the episodic recall task described in experiment 2 (Galinsky et al. 2003).

Message Content. As part of a consumer survey, participants were presented with one of two messages for a restaurant. Both messages contained competent and warm arguments as we aimed to assess whether power shifted participants' diagnosticity of each type of argument. As a consequence, we refer to our conditions as "competence-skewed" and "warmth-skewed," respectively. The competence-skewed message contained two competent arguments and one warm argument (translated from French):

The chef has built a reputation based on his skills and competence. The intelligent design of the place contributes to deliver a highly competent service by limiting both the kitchen and the wait staff's walking. The wait staff's friendly manners create a very inviting atmosphere in the restaurant.

In contrast, the warmth-skewed message contained two warm arguments and one competent argument (translated from French):

The chef's friendly reputation makes this restaurant very inviting. The dining room's interior design provides a very cozy feel to the place that makes customers feel at home. The wait staff's skills and training make them experts at their jobs.

Manipulation Checks. Finally, we assessed the extent to which participants viewed the message as conveying warmth versus competence on two 7-point scales, anchored at "not at all"–"very much." In addition, participants answered three questions assessing the extent to which they felt powerful during the persuasion task on 7-point scales (powerless-powerful; without control-in control; weak-strong) aggregated into a single power index ($\alpha = .89$).

Dependent Variables

Attitudes Toward the Restaurant. Participants' attitudes toward the restaurant were assessed through three

7-point scales assessing participants' opinion, anchored at bad-good; unfavorable-favorable; negative-positive ($\alpha = .92$).

Diagnosticity. Following past work, we assessed diagnosticity for each argument by asking participants about the extent to which the information was relevant and important. We used two 7-point scales anchored at not at all-very much (Aaker 2000; Aaker and Sengupta 2000). Participants' responses to the two items were strongly correlated ($r = .84$ for each argument or higher). Because each message contained both competent and warm arguments, this allowed us to create measures of individual-item diagnosticity within participants for both competent and warm arguments. Specifically, for each argument we first averaged across our two measures of diagnosticity (i.e., relevance and importance). Subsequently, we averaged across similar arguments to form a composite score of overall diagnosticity. For example, if a participant was exposed to two competent arguments and one warm argument, we would first compute diagnosticity for each separate item (i.e., mean of relevance and importance), and then average across the two means of the competence item to achieve our composite measure of diagnosticity for competence and take the single warmth item composite to achieve our composite measure of diagnosticity for warmth.

Similarity. We asked participants the extent to which they felt the message source was similar to them, using a 7-point scale (not at all-very much).

Results and Discussion

Manipulation Checks. A two-way ANOVA on the power index revealed participants reported feeling significantly more powerful in the high-power condition ($M = 4.18$, $SD = 1.53$) compared to the low-power condition ($M = 3.15$, $SD = 1.19$; $F(1, 97) = 14.19$, $p = .001$, $\eta_p^2 = .12$). No other effects emerged ($p > .49$). Second, a two-way ANOVA on the item measuring warmth revealed participants viewed messages as conveying more warmth in the warmth-skewed message condition ($M = 4.46$, $SD = 1.58$) than in the competence-skewed condition ($M = 3.37$, $SD = 1.21$, $F(1, 97) = 15.22$, $p < .001$, $\eta_p^2 = .13$). No other significant effect or interaction emerged on this item ($p > .27$). Third, a two-way ANOVA on the item measuring competence revealed participants viewed messages as conveying more competence in the competence-skewed condition ($M = 4.29$, $SD = 1.85$) than in the warmth-skewed condition ($M = 3.22$, $SD = 1.09$, $F(1, 97) = 12.27$, $p = .001$, $\eta_p^2 = .11$). No other significant effects emerged on this item ($p > .31$).

Attitudes Toward the Restaurant. A two-way ANOVA on participants' attitude score revealed a significant audience power \times message type interaction, $F(1, 97) = 16.95$, $p < .001$, $\eta_p^2 = .15$. No main effect of power or message type was present ($p > .36$). Low-power participants liked

the restaurant more following the warmth-skewed message ($M = 4.20$, $SD = 1.26$) compared to the competence-skewed message ($M = 3.18$, $SD = 1.09$), $F(1, 97) = 7.98$, $p = .006$, $\eta_p^2 = .07$). In contrast, high-power participants liked the restaurant more following the competence-skewed message ($M = 4.37$, $SD = 1.26$) compared to the warmth-skewed message ($M = 3.44$, $SD = 1.14$), $F(1, 97) = 8.64$, $p = .004$, $\eta_p^2 = .08$).

Similarity. A two-way ANOVA on similarity revealed no effect of power, message type, or a power \times message type interaction ($F < 1$).

Diagnosticity. A repeated ANOVA with power and message content as between-subject factors and argument type (warmth vs. competence) as a repeated factor revealed only a significant power \times argument type interaction, $F(1, 97) = 34.03$, $p < .001$, $\eta_p^2 = .26$. No three-way interaction emerged with message content. Post hoc tests revealed the nature of this interaction. Low-power audiences rated warm arguments as more diagnostic ($M = 3.70$, $SD = 1.43$) than high-power audiences ($M = 2.51$, $SD = .89$), $F(1, 97) = 24.43$, $p < .001$, $\eta_p^2 = .20$), but high-power audiences rated competent arguments as more diagnostic ($M = 3.56$, $SD = 1.51$) than low-power audiences ($M = 2.65$, $SD = .80$), $F(1, 97) = 14.55$, $p < .001$, $\eta_p^2 = .13$).

These effects add support to our account that audience power induces differences in diagnosticity of warmth versus competence information and ultimately affects what types of messages people are drawn toward. Of note, we also examined whether individual-item measures of diagnosticity mediated audience attitudes in this experiment. As shown in the previous analyses, power affects how diagnostic the arguments were. Furthermore, diagnosticity was correlated with attitudes ($r = .217$, $p = .029$). However, mediational analyses did not find evidence of a significant indirect effect. We suspect this lack of statistical mediation may have occurred because our items were designed to assess the individual diagnosticity of each item as opposed to participants' gestalt diagnosticity of the message. It may very well be that participants' overall weighting is based on a gestalt diagnosticity—which our items do not capture—as opposed to individual-item diagnosticity.

Mediation Through Power. Given that our diagnosticity items were not sensitive enough to capture mediation, one might raise the concern that the findings of this experiment operate through a mechanism other than audience power. To address this potential concern, we tested whether the effect of audience power on attitudes toward the restaurant was mediated by participants' feelings of power (i.e., our manipulation check) and whether these effects were moderated by whether the message content emphasized warmth versus competence (Hayes 2013, model 14). We used the linear code low power = -1 and high power = 1 . In addition, the warmth-skewed message

condition was coded as -1 and the competence-skewed message condition as 1 .

First, replicating the ANOVA results, we found that audience power predicted attitudes toward the restaurant ($\beta = .52$, $t(99) = 3.79$, $p < .001$). Next, a comprehensive regression predicting attitudes toward the restaurant from audience power, participants' feelings of power, and message content (warmth vs. competence) as a moderating variable revealed a main effect of message content ($\beta = -.76$, $t(96) = 2.22$, $p = .03$) and a significant message content \times audience power interaction ($\beta = .20$, $t(96) = 2.30$, $p = .03$). Neither participants' feelings of power ($\beta = .01$, $t(96) = .11$, $p = .91$) nor audience power ($\beta = .09$, $t(96) = .69$, $p = .48$) were significant factors. Crucially, the index of moderated mediation around participants' feelings of power did not contain zero (95% CI, .02–.51; Hayes 2013).

GENERAL DISCUSSION

Contributions to the Power, Persuasion, and Social Judgment Literatures

We believe this research makes several contributions. First, for the literature on power, this work represents an effort to study communicator power above and beyond source effects. In the study of source effects, the audience is aware of the communicator's power, and it is this explicit awareness that appears to increase the audience's persuasion. We demonstrate that psychological states of power, independent of the awareness of the power of the source, shape the message a communicator self-generates or selects. Moreover, we show the efficacy of such arguments can depend on the audience's power.

Conceptually, this work also extends the literature on power and persuasion. Lammers et al. (2013) manipulated interviewees' power and found that in mock interviews, even when unaware of interviewees' power, interviewers preferred high-power interviewees over low-power interviewees. Our work complements this finding and suggests one potential reason for this relationship: interviewers might have preferred high-power interviewees because they themselves felt high power (i.e., they had power over the interviewee's outcome) and thus focused on high-power interviewees' competence. However, the current findings also qualify prior work by suggesting that high-power communicators might not always be more persuasive, such as when audiences are psychologically in a state of powerlessness.

In addition, this research reveals the complex and dynamic nature of psychological power. Whereas much past research on psychological states of power has examined the effects of power on a single individual, this work highlights the importance of considering how psychological states of power can influence social dynamics between

individuals. We have studied the implications of these effects for persuasion, but power researchers could examine the interplay of different power states across a host of domains (Ronay et al. 2012).

Finally, for the literature on social judgments, this work offers a new psychological antecedent to people's focus on warmth and competence: lacking or having power, respectively. This is consistent with past findings that traditionally deprived groups such as the elderly or mentally disabled are perceived as more warm than competent, whereas the opposite holds for favored groups such as wealthy individuals (Cuddy et al. 2008). However, novel to the present work is the finding that momentary psychological states, such as power, can make people more or less sensitive to warmth and competence.

Limitations, Future Research, and Practical Implications

One direction for future research is to better understand the extent to which, if at all, different cultures moderate our findings. According to the agentic-communal perspective of power (Rucker et al. 2012), a sense of power enhances agency and can reinforce an individual's chronic orientation. In individualistic contexts, a sense of power increases one's self-focus and action orientation. In collectivist contexts, however, increases in power might foster a sense of responsibility and benevolence (Chen et al. 2001; Torelli and Shavitt 2011). In light of research suggesting that competence is associated with self-profitable motives, whereas warmth is associated with other-profitable motives (Peeters 2002), we hypothesize that cultural orientation could moderate, if not reverse, the present effects. That is, within a collectivist culture, a sense of power might increase the use and reliance on warmth information, not competence information.

A limitation of the present research is that we did not test the role of power in changing the accessibility of warmth and competence information, but instead focused on diagnosticity and the extent to which individuals place greater weight on warm and competent arguments. Based on the accessibility-diagnosticity framework (Feldman and Lynch 1988), power might also affect accessibility in addition to diagnosticity. As such, factors hindering information accessibility may moderate the findings we observed. This question represents a potential boundary condition for future exploration.

We did not test how making the communicator's and/or the audience's power salient alters persuasion. When a communicator is known to have high power, audiences may expect and desire competence in their statements, regardless of their own state of power. That is, knowledge about the communicator's power could create expectancies (i.e., expressions of competence for high power, expressions of warmth for low power; Rucker, Hu, and Galinsky

2014), which, if not met, would produce a negative response. Alternatively, when the source's power is known, it may simply serve as a heuristic cue to persuasion. When hierarchies are known and established, the mere association with the role may dictate persuasion, regardless of the message content (i.e., employees have to listen to bosses). Such outcomes may be particularly likely in situations where individuals tune out from the message arguments and simply focus on source power as a heuristic (Petty et al. 1981).

Conversely, when the audience's power is known, communicators might tune their message according to the power of the audience. One possibility is that low-power individuals who possess greater perspective-taking abilities (Galinsky et al. 2006) will be better able to strategically shift message content toward greater competence. Another possibility is that high-power individuals, because they see others through an instrumental lens, might become more strategic and tune their message according to the power level of their audience (Gruenfeld et al. 2008). Of critical importance, in settings where the hierarchy is known and explicit to individuals, factors other than the warmth and competence expressed in the messages may underlie persuasion.

Prior work in persuasion has made a distinction between the use of strong and weak arguments (e.g., Petty and Cacioppo 1984). In the present research, we either encouraged participants to generate compelling arguments (i.e., experiments 1 and 2) or used relatively strong arguments (i.e., experiments 3 and 4). If weak (i.e., specious) arguments are used, one possibility is that audiences will not view them as diagnostic, regardless of whether the arguments match or mismatch the audience's focus on competence or warmth. This would represent an important boundary condition of the present effects. Of additional note, the present experiments focused on relatively high-effort situations where both communicators and audiences were encouraged to process the information carefully. It is possible that under circumstances where elaboration or amount of processing is not constrained to be high, the introduction of weak arguments may backfire when they match the type of information viewed as diagnostic. For example, under moderate elaboration conditions, matching might encourage greater processing of information (e.g., Wheeler, Petty, and Bizer 2005). To the extent that matching produces greater information scrutiny, it might enhance persuasion when arguments are strong but reduce persuasion when they are weak. In some circumstances, the use of weak arguments may attenuate or reverse the matching effects observed in the present article.

Finally, future research could explore when matching versus power complementarity (i.e., mismatching) produces greater persuasion. Existing work suggests that hierarchical differentiation can sometimes produce positive consequences on performance. At the perceptual level,

participants like others more when an individual adopts a power posture opposite to their own and individuals also tend to adopt an opposite stance of a high- or low-power other (Tiedens and Fragale 2003). Furthermore, group tasks can produce better outcomes when there is a clear hierarchy as opposed to equality (Ronay et al. 2012). Such dominance complementarity is argued to be attractive because it facilitates interactions and performance (Maissen 2009) in dyadic task-oriented relationships (Tiedens, Unzueta, and Young 2007). The present research suggests an intriguing possibility. Due to the differential diagnosticity of warmth and competence, mismatched dyads might become more dysfunctional over time. For example, when working through a project, it is possible that those with power increasingly emphasize competence, and those with low power increasingly emphasize warmth, which would interfere with task performance. Future research should investigate dominance complementarity to better understand when positive versus negative effects of complementarity are present. For example, perhaps in conversational dialogues, where both positions of power are known to one another, dominance complementarity may work better than matching, but complementary may be less effective when power is unknown.

CONCLUSION

This research represents the first systematic effort to investigate the interplay between the psychological power of the communicator and of the audience on persuasion. We demonstrate that a kind of "psychological attunement" can occur between communicators and audiences through power—people are more persuasive to individuals in a similar power mindset, despite neither party being aware of the power level of the other party. These findings not only shed light on the effect of power on a fundamental consumer activity—persuasion—but also illustrate the role of warmth and competence in persuasive contexts.

DATA COLLECTION INFORMATION

The first author supervised data collection for all four experiments. The first experiment was conducted at HEC Paris during the spring of 2012. The second experiment was conducted at Northwestern during the spring of 2010. The third experiment was conducted at the INSEAD-Sorbonne Behavioural Lab during the spring of 2012. The fourth experiment was conducted at the INSEAD-Sorbonne Behavioural Lab during the fall of 2015. The first author was responsible for data analysis and storage, with guidance from the second and third authors.

APPENDIX

APPENDIX 1. LIST OF COMPETENT AND WARM ARGUMENTS, EXPERIMENT 3 (TRANSLATED FROM FRENCH).

List of warm arguments:

1. The chef's friendly reputation makes this restaurant very inviting.
2. The dining room's interior design provides a very cozy feel to the place that makes customers feel at home.
3. The wait staff's friendly manners create a very inviting atmosphere in the restaurant.
4. The chef regularly comes out to the dining room to greet and thank the customers.
5. You will find very amiable sommeliers able to assist you in your choice of wine.
6. The walls' covering with warm colors gives a very friendly feel to the restaurant.
7. The inviting smells coming out of the kitchen will certainly remind you of your own home.
8. You will find polite waiters willing to make you feel at ease in this restaurant.
9. The waiters are very trustworthy in providing just the right meal.

List of competent arguments:

10. The chef's cuisine skills have been recognized and singled out in a specialized food magazine.
11. The waiters follow a specific training that makes them able to give customers full information about the food served, as well as where it comes from.
12. You will find capable sommeliers able to assist you in your choice of wine.
13. The chef's expertise ranges from French to Japanese and to Brazilian culinary techniques.
14. The chef has built a reputation based on his skills and competence.
15. The wait staff's skills and training make them experts at their jobs.
16. The intelligent design of the place contributes to deliver a highly competent service by limiting both the kitchen and the wait staff's walking.
17. The inviting smells coming from the kitchen testify to the chef's extended skills.
18. The capabilities of this restaurant, from waiters to cooks and interior design, will meet your expectations.

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