The Power of Projection for Powerless and Powerful People: Effect of Power on Social Projection Is Moderated by Dimension of Judgment

Social Psychological and Personality Science I-9 © The Author(s) 2017 Reprints and permission: sagepub.com/journalsPermissions.nav DOI: 10.1177/1948550617698201 journals.sagepub.com/home/spp SAGE

Claudia Toma¹, Vincent Yzerbyt², Olivier Corneille², and Stéphanie Demoulin²

Abstract

Past social projection research has mainly focused on target characteristics as a moderator of projective effects. The current research considers the power of the perceiver and how it affects projection of competence and warmth. In three studies, participants first rated themselves on a list of traits/preferences, then performed a power manipulation task, and, finally, rated a target person on the same list. Studies I and 2 reveal that the effect of power on social projection is moderated by dimension of judgment: high-power/low-power participants project more on competence/warmth than low-power/high-power participants. A meta-analysis conducted on Studies I, 2, 3, and two additional studies confirmed those results. Study 3 additionally shows that high power increases the salience of competence, whereas low power increases the salience of warmth. Implications for both the power and the social perception literatures are discussed.

Keywords

social projection, power, warmth, competence, social distance

Social projection, the tendency to expect similarities between oneself and others (Robbins & Krueger, 2005), is a strong and pervasive egocentric bias that can orient social judgments about others in significant ways (Krueger & Clement, 1994). Social projection has received considerable attention over the last decade, especially with regard to its boundary conditions, with most of the research examining the role of target characteristics as a moderator of social projection. For instance, it has been shown that projection is stronger for in-group than for outgroup members (Cadinu & Rothbart, 1996; Clement & Krueger, 2002; Krueger & Zeiger, 1993), for targets that we like (Machunsky, Toma, Yzerbyt, & Corneille, 2014), for targets with whom we cooperate (Toma, Corneille, & Yzerbyt, 2012; Toma, Yzerbyt, & Corneille, 2010), and for targets sharing similarities with oneself (Ames, 2004; Ames, Mor, & Toma, 2013).

In the present research, we focus on the role of power in social projection. More specifically, we examine how the power status of the perceiver moderates social projection effects and how this may critically depend on the dimension of judgment (warmth vs. competence).

Main Effect of Power on Projection

Power is a complex concept that includes aspects such as "control," "dominance," "outcome dependency," or "influence" and characterizes both intergroup (i.e., social power) and interpersonal relations (i.e., interpersonal power; Overbeck & Park, 2001). Power refers to differences among two or more interaction partners (Schmid Mast, 2010) and involves both power over others and freedom from their influence (Fehr, Holger, & Wilkening, 2013; Sturm & Antonakis, 2015). The influence of power on social judgment has a long tradition in social psychology (see Guinote, 2013). However, few studies directly examined the impact of power on projection (for an exception, see Overbeck & Droutman, 2013). The existing literature suggests inconsistent effects.

One body of evidence suggests that high-power individuals project more than low-power individuals. A state of power is associated with a global processing style (Förster, 2009; Smith & Trope, 2006), with a more heuristic way to process

Corresponding Author:

Email: claudia.toma@ulb.ac.be

¹Centre Emile Bernheim, Solvay Brussels School of Economics and Management, Université libre de Bruxelles, Brussels, Belgium ²Université catholique de Louvain, Louvain-la-Neuve, Belgium

Claudia Toma, Centre Emile Bernheim, Solvay Brussels School of Economics and Management, Université libre de Bruxelles, 50 Av F D Roosevelt, Brussels 1050, Belgium.

information (Fiske, 1993). High-power people are also more egocentric, they lack in perspective taking (Galinsky, Magee, Inesi, & Gruenfeld, 2006), focus more on the self (Brauer & Bourhis, 2006), are more inspired by themselves than by others (van Kleef, Oveis, Homan, van der Lowe, & Keltner, 2015), and tend to use the self as a reference point when judging others (Overbeck & Droutman, 2013). Lastly, high-power people approach others (Keltner, Gruenfeld, & Anderson, 2003), leading to a decrease in social distance. In sum, given that social projection is a heuristic process (Kruger, 2007), allowing to increase similarities (Ames, 2004) and to decrease social distance (Liviatan, Trope, & Liberman, 2008; Machunsky et al., 2014; Stephan, Liberman, & Trope, 2010), one might conclude that power should enhance social projection.

There is also support, however, for the opposite idea that low-power individuals project more than high-power individuals. Low-power people are motivated to form accurate impressions about others (Fiske, Morling, & Stevens, 1996; Keltner & Robinson, 1997) but are less interpersonally sensitive (Schmid Mast, Jonas, & Hall, 2009) and less able to produce accurate judgments of others (Hall & Bernieri, 2001). Low-power people exhibit a higher level of self-awareness (Garcia, 2002) and rely more easily on self-information when judging others (see also Vorauer & Ross, 1999). In line with these findings, one might equally conclude that low-power people.

Effect of Power on Projection Depends on Dimension of Judgment

Besides looking at the main effect of power, we would like to propose here that projective effects among low- and highpower perceivers vary as a function of the dimension of judgment, namely, warmth or competence. Decades of research across an impressive number of fields have suggested that two dimensions—warmth and competence—govern social perceptions (for reviews, see Cuddy, Fiske, & Glick, 2007, 2008; Yzerbyt, 2016).

High- and low-power people differ in the relative value they attach to competence and warmth both at the intergroup and at interpersonal level. At the intergroup level, members of highstatus groups see themselves (and are seen by others) as more competent than warm, whereas the reverse is true for members of low-status groups (Cambon, Yzerbyt, & Yakimova, 2015; Oldmeadow & Fiske, 2010; Yzerbyt, Provost, & Corneille, 2005). At the interpersonal level, the experience of having power increases people's action-orientation (Galinsky, Gruenfeld, & Magee, 2003), confidence (Anderson & Berdahl, 2002), efficacy (Cuddy et al., 2008), which are all related to competence, whereas the absence of power increases people's attentiveness to others (Lee & Tiedens, 2001; Rucker, Dubois, & Galinsky, 2011), ability to take others' perspective (e.g., Fiske, 1993; Galinsky et al., 2006) or compassion (e.g., van Kleef et al., 2008), which are all related to warmth. As a consequence, competence versus warmth seem to be relevant dimensions for high- versus low-power people, respectively, because they

reflect domains in which high- versus low-power people define themselves and in which they are recognized to be superior.

As noted by Overbeck and Droutman (2013), the power position may lead individuals to rely on "the most suitable source of information" when judging others. For example, Ames and Bianchi (2008) found that high- versus low-power people are concerned with the warmth versus competence of the target. High- versus low-power people have different interactional concerns, and those concerns are associated in return with high- versus low-power positions by third-party observers (Ames, Bianchi, & Magee, 2010).

Another way of showing that high- and low-power people differ in their interactional concerns is to test whether they project differently their competence and warmth onto others. We hypothesized here that high- versus low-power perceivers project more on competence versus warmth, respectively. In addition, because competence versus warmth is central in the self-definition and in the evaluation of others, the speed in processing those traits should be different: High- versus lowpower people should react faster to competence versus warmth, respectively.

We tested these hypotheses in three studies. In Study 1, participants were assigned to high- or low-power positions using a manipulation of social roles (Anderson & Galinsky, 2006; Griffin, Fuhrer, Stansfeld, & Marmot, 2002) and were asked to describe the self and a target person on a list of warmth and competence traits. In Study 2, we used an experiential-power manipulation (Galinsky et al., 2003), which allowed introducing a control condition, thus testing whether the high power increases projection or low power decreases projection. In Study 3, we additionally tested (using a reaction time measure) whether changes in the salience of competence and warmth, following high- and low-power inductions, influenced social projection.

Study I

Method

Participants and Design

In all, 50 university students (24 females) took part in this study. They ranged in age from 17 to 25 (M = 20.96, SD = 2.16). They were randomly assigned to one of the two conditions (high power vs. low power). The sample size was determined a priori using the effect size from Study 1 of Overbeck and Droutman (2013). With an effect size of $\eta_p^2 = .02$, the number of observations needed for 90% power is 890 (using G*Power). Given that each participant generated 16 observations (see below), the ideal sample size would be 55 participants.

Procedure

Participants first rated themselves on eight competence traits (e.g., intelligent, determined, lazy, capable, convincing,

disorganized, incompetent, and unreliable; $\alpha = .63$) and eight sociability traits (e.g., friendly, disdainful, funny, nice, popular, cold, hostile, and insensitive; $\alpha = .73$). Half of these traits were positive and half were negative and they were randomly presented. These traits were taken from Kervyn, Yzerbyt, Judd, and Nunes (2009). Participants had to indicate the extent to which each of the traits characterizes them.

Second, participants read a scenario in which they imagined working on a collaborative task with another person. They were told that they were working in a company that deals with the digitalization of films recently released in cinemas. Participants were randomly assigned to the leader (high-power) or the subordinate (low-power) position. They learned that the leader was responsible for the quality of the project, for structuring the different tasks, and for the management of time. The subordinate contributed with ideas but also needed to comply with the leader's requests and deadlines.

Third, participants were asked to rate the person with whom they imagined to collaborate on the same list of traits used to rate the self. Participants also judged the valence of each trait. Finally, as a manipulation check, participants indicated whether they felt they had power in the situation. A 9-point scale was used for all ratings and in all studies. Participants were then debriefed, thanked, and dismissed.

Results

Manipulation Check

Participants in the low-power condition estimated that they had less power (M = 5.42, SD = 2.02) than participants in the high-power condition (M = 7.58, SD = 1.21), F(1, 47) = 20.30, p = .001.

Main Analyses

Our data were submitted to a mixed-model analysis¹ (Hox, 2010). We used target ratings as the criterion, self-ratings, dimension, and trait valence as predictors at Level 1 and power as a predictor at Level 2. Our hypothesis is that the self-target projection is influenced by our Level-2 variable (power) but also by a Level-1 variable (dimension). In other words, we predicted a significant cross-level interaction between self-ratings, dimension, and power when controlling for trait valence. Valence is an important predictor as it allows both controlling for idiosyncratic differences in the way people perceive traits and testing if our predicted pattern depends on valence. Results indicated that projection, that is, the positive relation of the self-ratings and the other ratings, did not depend on power, B = 0.02, SE = 0.03, t = 0.73, p = .46, but depended on dimension, B = 0.11, SE = 0.03, t = 3.30, p = .001, such that participants projected more on warmth than on competence. More importantly, the dimension by self-rating interaction was further moderated by the power manipulation, B = -0.11, SE =0.02, t = -4.25, p = .001. To probe this interaction, we tested the effect of power on projection separately for each dimension. For warmth, there was a significant effect of power on

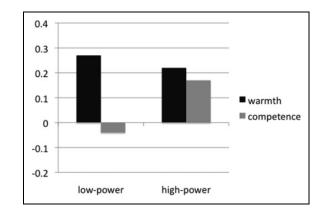


Figure 1. Standardized β s measuring projection by condition and dimension in Study 1.

projection, B = -0.08, SE = 0.04, t = -2.10, p = .036. Participants in the low-power condition projected their warmth traits onto the target, B = 0.38, SE = 0.07, t = 5.58, p = .001, more than participants in the high-power condition, B = 0.21, SE = 0.06, t = 3.48, p = .001. For competence, there was also a significant effect of power on self-target projection, B = 0.13, SE = 0.04, t = 3.21, p = .001. This time, participants in the high-power condition projected their competence traits onto the target, B = 0.21, SE = 0.06, t = 3.66, p = .001, more than participants in the low-power condition, B = -0.05, SE = 0.06, t = -0.85, p = .396. The standardized coefficients reflecting projection as a function of condition and dimension are depicted in Figure 1.

Projection was also influenced by valence, B = 0.02, SE = 0.01, t = 2.22, p = .027, such that participants projected more on positive than on negative traits.

Discussion

This first study confirmed our prediction that both high- and lowpower participants projected onto others but that this tendency varied as a function of the dimension under focus. Specifically, projection was higher for the low power than for the high power on warmth, whereas the reverse pattern emerged for competence.

One limitation of the study is that the role-power assignment affected both the power of the self and the power of the target. Therefore, it could be that the effects we obtained were also due to the target's power position. Another limitation is that the present findings provide no information on whether the power manipulation increases or decreases projection on competence and warmth. We, therefore, sought to replicate these findings, this time using an experiential power manipulation and including a control condition.

Study 2

Method

Participants and Design

In all, 75 university students (50 females) took part in this study. They ranged in age from 16 years to 29 years

(M = 20.63, SD = 2.74). They were randomly assigned to one of the three conditions (low power, control, or high power). The sample size determined a priori using the effect size of Overbeck and Droutman (2013) was 78 participants.

Procedure

The same procedure as in Study 1 was used. Participants rated themselves on eight competence ($\alpha = .73$) and eight warmth traits ($\alpha = .72$). Next, power was manipulated. This time, participants completed the task of experiential power designed by Galinsky, Gruenfeld, and Magee (2003). In the high-power condition, participants were asked to recall a time in which they had power over another individual. In the low-power condition, participants were asked to recall a time in which another person had power over them. In the control condition, participants were asked to recall a neutral event that occurred one day before. Next, participants rated a fictitious student from their university on the same list of traits used to rate the self.

As a manipulation check, participants indicated the extent to which they felt they were dominant and powerful in the situation they described (r = .80, M = 3.78, SD = 2.00).

Results

Manipulation Check

Participants² in the low-power condition estimated that they had less power (M = 1.96, SD = 0.99) than participants in the control condition (M = 3.87, SD = 1.66) who, in turn, considered that they had less power than participants in the high-power condition (M = 5.44, SD = 1.53), F(2, 68) = 34.95, p = .001. All pairwise differences were significant, $p_s = .001$.

Main Analyses

The same multilevel approach as in Study 1 indicated that projection did not depend on power, B = -0.01, SE = 0.03, t = -0.490, p = .624, but depended on dimension, B = 0.10, SE = 0.03, t = 4.00, p = .001. Again, participants projected more on warmth than on competence. More importantly, this Dimension × Self-Rating interaction was qualified by the power manipulation, B = -0.10, SE = 0.03, t = -3.03, p = .003. To probe this interaction, the impact of power on projection was analyzed separately for warmth and competence.

For warmth, the self-rating by power manipulation proved significant, B = -0.11, SE = 0.05, t = -2.25, p = .024, as well as all pairwise comparisons. Specifically, participants in the low-power condition (projection: B = 0.35, SE = 0.07, t = 5.03, p = .001) projected more than participants in the control condition (projection: B = 0.24, SE = 0.08, t = 3.13, p = .002), B = 0.23, SE = 0.04, t = 6.02, p = .001, who, in turn, projected more than participants in the high-power condition (projection: B = 0.13, SE = 0.07, t = 1.85, p = .065), B = 0.26, SE = 0.04, t = 6.18, p = .001.

For competence, the Self-Rating \times Power Manipulation interaction was also significant, B = 0.08, SE = 0.04, t =

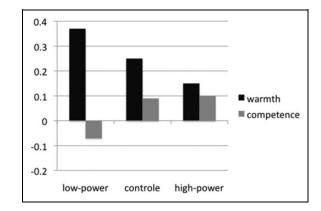


Figure 2. Standardized β s measuring projection by condition and dimension in Study 2.

2.04, p = .042. Follow-up pairwise comparisons revealed a significant difference between the high-power and low-power conditions, B = 0.08, SE = 0.04, t = 2.08, p = .037. Participants in the high-power condition, B = 0.10, SE = 0.05, t = 1.96, p = .05, projected more than participants in the low-power condition, B = -0.07, SE = 0.06, t = -1.13, p = .26. Participants in the control condition, B = 0.09, SE = 0.06, t = 1.41, p = .16, fell in between and were not significantly different from the two other conditions. The standardized coefficients reflecting projection as a function of power manipulation and dimension are depicted in Figure 2.

Self-target projection was not influenced by valence, B = 0.009, SE = 0.008, t = 0.630, p = .529.

Discussion

Results confirmed that participants in the low-power condition projected more warmth than participants in the high-power condition, whereas the reverse was found for competence. Participants in the control condition fell in between low- and highpower participants on both warmth and competence. Confirming the pattern observed in Study 1, participants in all conditions projected their warmth characteristics, whereas only participants in the high-power condition projected their competence characteristics.

Study 3

Compared to Studies 1 and 2, Study 3 implements two important changes. First, self-ratings were collected before (self1) and after (self2) the power manipulation. Second, we collected the rating times in order to inform about possible salience effects. More specifically, we hypothesized that because warmth versus competence are central dimensions for low- versus high-power people, those traits should be more salient and should therefore be processed faster by low- versus high-power people, respectively. These changes allowed addressing several questions.

First, is the self-concept stable across power conditions? We expected this to be the case, as our hypothesis relates to a

change in the salience of the warmth and competence dimensions in low- and high-power people, rather than to a change in their self-concept. Second, would response times (RTs) reveal the increased salience of competence following high power but enhanced salience of warmth following low-power induction?³ We anticipated exactly such a pattern. Third, does the self-concept measured *after* the power induction (self2) replicates the projective effects observed in Studies 1 and 2 (on self1)? We predicted that it would and, if anything, that self2 would provide a purer and more proximal measure than self1 in examining social projective effect. Finally, we tested whether the differential salience of competence and warmth for high- and low-power participants would affect the level of projection. We predicted that projective effects would be larger on the more salient traits.

Method

Participants and Design

In all, 137 university students (38 females) took part in this study. They ranged in age from 18 years to 29 years (M = 20.60, SD = 2.15). They were randomly assigned to one of the two conditions (low power vs. high power). The sample size determined a priori using the effect size of Overbeck and Droutman (2013) was 73 participants.

Procedure

In contrast to Studies 1 and 2, participants rated themselves on competence and warmth traits both before (self1) and after (self2) the power manipulation. Following the self-ratings, participants rated the target on the same traits. RTs were collected on self and target ratings. The remainder of the procedure was similar to Study 2, including the manipulation checks.

Manipulation Check

Confirming the success of our power manipulation, low-power participants indicated that they felt they had less power (M = 3.22, SD = 1.58) than high-power participants (M = 6.00, SD = 1.71), F(1, 135) = 97.13, p = .001.

Changes in Self-Ratings and Salience

We first tested whether the self-ratings and self-RT on competence and warmth changed after the power manipulation. A 2 (self: self1 vs. self2) × 2 (dimension: warmth vs. competence) × 2 (condition: low power vs. high power) mixed analysis of variance on self-ratings with repeated measures on the first two factors revealed that both two-way interactions, Self × Dimension, F(1, 135) = 1.53, p = .22, and Self × Condition, F(1, 135) = .03, p = .861, as well as the three-way interaction, F(1, 135) = .404, p = .525, failed to reach significance. In other words, the self-concept remained stable following the power induction.

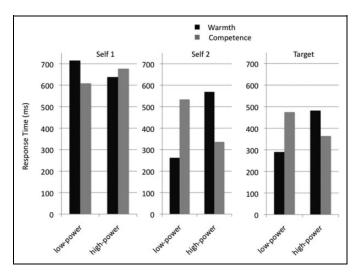


Figure 3. Response times by condition and dimension in Study 3.

Interestingly, the same analysis on self-RT (log-transformed participants' RTs) revealed that the three-way interaction was close to significance, F(1, 135) = 3.82, p = .051. This interaction revealed that low-power participants were faster on warmth after (M = 0.25, SD = 1.14) than before (M = 0.82, SD = 4.22) the manipulation, F(1, 135) = 9.05, p = .003, but they were not faster on competence after (M = 0.54, SD = 3.69) than before (M = 0.61, SD = 2.31) the manipulation, F(1, 135) = 0.119, p = .730. In contrast, high-power participants were faster on competence after (M = 0.34, SD = 1.56) than before (M = 0.68, SD = 3.52) the manipulation, F(1, 135) = 4.14, p = .042, but they were not faster on warmth after (M = 0.57, SD = 4.07) than before (M = 0.64, SD = 3.58) the manipulation, F(1, 135) = 0.083, p = .773.

Another interesting way to probe this interaction is by conducting analyses for each round of self-rating. Participants in high-power/low-power condition should be faster to rate competence/warmth characteristics than participants in low-power/ high-power condition on self2-RT, but not on self1-RT, that is, before the power induction. As predicted, this interaction was significant for self2-RT, F(1, 135) = 4.27, p = .039, but not for self1-RT, F(1, 135) = .668, p = .414 (see Figure 3). Follow-up analyses on self2-RT revealed that low-power participants reacted faster than high-power participants on the warmth dimension, F(1, 135) = 3.13, p = .07, but that this difference between conditions was not significant on the competence dimension, F(1, 135) = 1.32, p = .25 (self2-RT).

Self-Ratings and Projection

Using self2 ratings, the multilevel analysis indicated that projection did not depend on power, B = -0.02, SE = 0.03, t = -0.831, p = .41, but tended to depend on dimension, B = 0.05, SE = 0.03, t = 1.72, p = .08, such that participants projected more on warmth than on competence. More importantly, this Self-Rating × Dimension interaction depended on power manipulation, B = -0.06, SE = 0.03, t = -2.01, p = .044. 0.7 0.6 0.5 0.4 warmth competence 0.3 0.2 0.1 0 high-power low-power

Figure 4. Standardized β s measuring projection by condition and dimension in Study 3.

To probe this interaction, we tested the effect of power on projection separately for each dimension. For warmth, there was no significant effect of power on projection, B = -0.03, SE = 0.05, t = 0.691, p = .49. Both participants in the lowpower condition and in the high-power condition projected their warmth traits onto the target, B = 0.36, SE = 0.07, t =5.18, p = .000, and B = 0.29, SE = 0.07, t = 4.31, p = .000, respectively. For competence, there was a significant effect of power on projection, B = 0.08, SE = 0.03, t = 2.25, p =.025. Participants in the high-power condition projected their competence traits onto the target, B = 0.30, SE = 0.05, t =5.56, p = .000, more than participants in the low-power condition, B = 0.13, SE = 0.06, t = 2.30, p = .021. The standardized coefficients reflecting projection as a function of power manipulation and dimension are depicted in Figure 4. Self2-target projection was not influenced by valence, B = 0.003, SE =0.0005, t = 0.571, p = .568.

When using the now relatively less active self1-ratings, the Self-Ratings \times Dimension \times Power interaction was not significant anymore, B = -0.04, SE = 0.03, t = -1.35, p = .17. For warmth, there was no significant effect of power on projection, B = -0.01, SE = 0.05, t = 0.167, p = .868, as both participants in the low power, B = 0.27, SE = 0.07, t = 3.88, p = .000, and high power, B = 0.25, SE = 0.07, t = 3.65, p = .000, projected their warmth into the target. For competence, the effect of power on projection approached significance, B = 0.08, SE = 0.04, t = 1.90, p = .058. Participants in the high-power condition projected their competence traits onto the target, B = 0.25, SE = 0.05, t = 4.54, p = .000, more than participants in the low-power condition, B = 0.11, SE = 0.06, t = 1.93, p =.053. Self1-target projection was not influenced by valence, B = 0.002, SE = 0.0005, t = -0.428, p = .668.

Salience and Projection

As can be seen in Figure 3, the target-RT showed the same Dimension \times Condition interaction as the one observed on the self2-RT, F(1, 135) = 7.15, p = .008. On the warmth dimension, low-power participants reacted faster than high-power participants, F(1, 135) = 5.71, p = .017. As for the competence

dimension, the difference between conditions was in the expected direction but again failed to reach significance, F(1,(135) = 1.93, p = .16. Not surprisingly, we expected and indeed found self2-RT to predict target-RT, B = 0.04, SE = 0.01, t =2.16 p = .031, but also as a function of power and dimension, B = 0.03, SE = 0.01, t = 1.95 p = .051.

Finally, we tested whether the salience of competence and warmth traits for high- and low-power participants (self2-RT) moderated the level of projection. A multilevel model using target ratings as criterion and self-ratings, self2-RT, their interaction as predictors, revealed that this interaction between self2-ratings and self2-RT approached significance, B =0.01, SE = 0.007, t = 1.86, p = .063. This pattern suggests that participants projected more their self-traits onto the target traits when they themselves reacted faster to those traits (as is the case for low-power people on warmth and for high-power people on competence).

Discussion

Consistent with Studies 1 and 2, the effect of power on projection was moderated by dimension of judgment. This time, however, effects clearly emerged on the most proximal measure (self2), suggesting that the second collection of ratings updated self-representations collected at Time 1. Even though the selfcontent remained stable across measurement times, the salience of the traits varied: High-power participants reacted faster on competence than low-power participants, whereas the reverse effect was found for warmth. Of interest too, more projection was observed on the most salient traits. This pattern of finding converges in supporting the view that low power and high power react differently to dimensions of the self and that the more salient dimensions are preferentially used as a basis for projection.

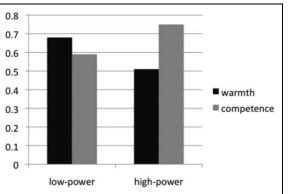
A meta-analysis performed on the three studies reported here and two additional unreported studies (total N = 327 participants) confirmed the interaction hypothesis: high-power/ low-power project more on competence/warmth than low power/high power (see Supplemental Material).

General Discussion

In this research, we tested whether the effect of power on projection depended on the characteristics to be projected, namely, warmth or competence. We hypothesized that high- and low-power people emphasize their most salient traits when projecting onto others, so that high-power people should mainly project their competence, whereas low-power people should mainly project their warmth. Across three studies and a metaanalysis, using different power manipulations and different characteristics, we found support for our interaction hypothesis.

We also found that high power enhances the salience of competence whereas low power enhances the salience of warmth and that more salient dimensions result in larger projective effects. This is consistent with previous research





showing that high-power people attach more value to competence than to warmth, whereas the reverse is true for lowpower people (Cambon et al., 2015; Oldmeadow & Fiske, 2010; Yzerbyt, 2016; Yzerbyt et al., 2005). These findings suggest that competence is the salient dimension for high-power people, whereas warmth is the salient dimension for lowpower people. Because the salient characteristics have a greater influence on self and others judgments (Vorauer & Ross, 1999), our research suggests that both low- and high-power people project onto others but that they mainly project their most salient characteristics.

These traits became salient probably because low- and highpower people learn through experience that in some social interactions or for some specific tasks, some traits are more important than others. A study by Toma, Yzerbyt, and Corneille (2012) showed that people project more competence than warmth when the task requires intelligence, but more warmth than competence when the task requires sociability. Given that social projection is conceptualized as a cognitive tool (Krueger & Clement, 1994) but also as a motivational mechanism (Toma & Woltin, 2012), the salience of traits is not incompatible with a more motivational explanation for the effect of power on social projection. For example, power increases social distance (Galinsky et al., 2006; Lammers, Galinsky, Gordijn, & Otten, 2012; Magee & Smith, 2013) and our studies show that high-power people project less than lowpower people on warmth, which is essentially social and relates to interpersonal distance. At the same time, high-power people projected more on competence, which might be consistent with studies showing that high-power people display approach tendencies (Keltner et al., 2003). It could be that powerful people feel generally distant toward others, but manifest approach tendencies on dimensions conveying a sense of competence.

Some limitations of our studies must be acknowledged. One important limitation of the present studies is the absence of individuating information about the target. One could argue that under such circumstances participants were forced to rely on their own characteristics when judging the target. Of importance too, people in real-life situations often have limited information about others and are often left to form expectations about them when individual information is lacking. Another limitation could be that our manipulation of power was never face-to-face and therefore not relational enough. We, however, used the typical manipulations used in the literature (imagined interaction, Anderson & Galinsky, 2006, and experiential power, Galinsky et al., 2003) that proved to be equivalent. Future studies should use a more relational manipulation of power.

Despite these reservations, the present work has important implications. These studies extend previous work on how power affects social projection (Overbeck & Droutman, 2013) and suggest that projection depend on the power position and the characteristics to be projected. People do not only project as a function of how they see the target (Clement & Krueger, 2002; Krueger & Zeiger, 1993; Machunsky et al., 2014) but also as a function of where they find themselves in the social structure, as also found by Overbeck and Droutman (2013). Of note, however, whereas Overbeck and Droutman (2013) found that high-power people self-anchor more than low-power people, we show here that high-power people are anchoring more on competence than on warmth traits, but they are also able to anchor on warmth traits although to a lesser extent. Overall, this suggests that high-power use projection on both dimensions, which is consistent with Overbeck and Droutman (2013) who showed that high-power project more.

Our work has also implications for research on the two fundamental dimensions of social judgment (for reviews, see Fiske, 2015; Yzerbyt, 2016). Competence and warmth underlie social perception across different research domains, namely, person perception (Zanna & Hamilton, 1972), intergroup perception (Fiske, Cuddy, & Glick, 2007), and face perception (Montepare & Dobish, 2003). For instance, recent work by Yzerbyt and Cambon (2017) show that members of highpower groups are particularly keen to have their superiority acknowledged in the realm of competence whereas lowpower groups more than anything hope to establish their superiority on warmth. The present research indicates that warmth and competence are also important dimensions for social projection research. For example, all our studies showed that participants projected more on warmth than on competence, which is consistent with the primacy role of warmth in social perception (Fiske et al., 2007).

Conclusion

By taking into account the joint role of power and dimensions of judgment (warmth and competence), this work contributes to a more complete picture of the effects of power on social projection. Our results suggest that low- and high-power people tend to project on those dimensions that are most salient for them in social interactions, warmth for low-power people and competence for high-power people.

Acknowledgments

We wish to thank Mihaela Cristea, Marie Renauld, and Catherine Signon, for assistance in data collection.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by a grant from Fonds de la Recherche Scientifique (F.R.S.—FNRS FC 85908) to the first author.

Notes

 Preliminary analyses indicated that it was unnecessary to treat traits as a random factor (Judd, Westfall, & Kenny, 2017). Also, as a means to simplify the analyses and to secure more power for the tests of interests, we initially conducted a model including all possible effects and dropped nonsignificant higher interactions that were not of interest (those including valence) before running the final analysis. The effect sizes were not computed here, given that this is not common practice for multilevel analyses.

- 2. Three participants were excluded from analyses because they had Cook distances superior to 0.8 (4/*N*) on more than four traits.
- Although reaction time is not the only measure of salience, it is a very used one. For example, the classical Implicit Association Test (IAT; based on reaction-time measure) is assessing asymmetries in salience between categories and concepts.

Supplemental Material

The online data supplements are available at http://journals.sagepub.com/doi/suppl/10.1177/1948550617698201.

References

- Ames, D. R. (2004). Strategies for social inference: A similarity contingency model of projection and stereotyping in attitude prevalence estimates. *Journal of Personality and Social Psychology*, 87, 573–585.
- Ames, D. R., & Bianchi, E. C. (2008). The agreeableness asymmetry in first impressions: Perceivers' impulse to (mis)judge agreeableness and how it is moderated by power. *Personality and Social Psychology Bulletin*, 34, 1719–1736.
- Ames, D. R., Bianchi, E. C., & Magee, J. C. (2010). Professed impressions: What people say about others affects onlookers' perceptions of speakers' power and warmth. *Journal of Experimental Social Psychology*, 46, 152–158.
- Ames, D. R., Mor, S., & Toma, C. (2013). The double-edge of similarity and difference mindsets: What comparison mindsets do depends on whether self or group representations are focal. *Journal* of Experimental Social Psychology, 49, 583–587.
- Anderson, C., & Berdahl, J. L. (2002). The experience of power: Examining the effects of power on approach and inhibition tendencies. *Journal of Personality and Social Psychology*, 83, 1362–1377.
- Anderson, C., & Galinksy, A. D. (2006). Power, optimism, and risktaking. European Journal of Social Psychology, 36, 511–536.
- Brauer, M., & Bourhis, R. Y. (2006). Social power. European Journal of Social Psychology, 36, 601–616.
- Cadinu, M. R., & Rothbart, M. (1996). Self-anchoring and differentiation processes in the minimal group setting. *Journal of Personality* and Social Psychology, 70, 661–677.
- Cambon, L., Yzerbyt, V. Y., & Yakimova, S. (2015). Compensation in intergroup relations: An investigation on its structural and strategic foundations. *British Journal of Social Psychology*, 54, 140–158.
- Clement, R. W., & Krueger, J. (2002). Social categorization moderates social projection. *Journal of Experimental Social Psychology*, 38, 219–231.
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2007). The BIAS Map: Behaviors from intergroup affect and stereotypes. *Journal of Per*sonality and Social Psychology, 92, 631–648.
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The Stereotype Content Model and the BIAS Map. In M. P. Zanna (Ed.), Advances

in experimental social psychology (Vol. 40, pp. 61–149). New York, NY: Academic Press.

- Fehr, E., Holger, H., & Wilkening, T. (2013). The lure of authority: Motivation and incentive effects of power. *American Economic Review*, 103, 1325–1359.
- Fiske, S. T. (1993). Controlling other people: The impact of power on stereotyping. *American Psychologist*, 48, 621–628.
- Fiske, S. T. (2015). Intergroup biases: A focus on stereotype content. *Current Opinion in Behavioral Sciences*, *3*, 45–50.
- Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2007). Universal dimensions of social cognition: Warmth, then competence. *Trends in Cognitive Science*, 11, 77–83.
- Fiske, S. T., Morling, B. A., & Stevens, L. E. (1996). Controlling self and others: A theory of anxiety, mental control, and social control. *Personality and Social Psychology Bulletin*, 22, 115–123.
- Förster, J. (2009). Relations between perceptual and conceptual scope: How global versus local processing fits a focus on similarity versus dissimilarity. *Journal of Experimental Psychology: General*, 138, 88–111.
- Galinsky, A. D., Gruenfeld, D. H., & Magee, J. C. (2003). From power to action. *Journal of Personality and Social Psychology*, 85, 453–466.
- Galinsky, A. D., Magee, J. C., Inesi, M. E., & Gruenfeld, D. H. (2006). Power and perspectives not taken. *Psychological Science*, 17, 1068–1074.
- Garcia, S. M. (2002). Power and the illusion of transparency in negotiation. Journal of Business and Psychology, 17, 133–144.
- Griffin, J. M., Fuhrer, R., Stansfeld, S. A., & Marmot, M. (2002). The importance of low control at work and home on depression and anxiety: Do these effects vary by gender and social class? *Social Science & Medicine*, 54, 783–798.
- Guinote, A. (2013). Social power and cognition. In D. E. Carlston (Ed.), *The Oxford handbook of social cognition* (pp. 575–587). Oxford, England: Oxford University Press.
- Hall, J., & Bernieri, F. (Eds.). (2001). *Interpersonal sensitivity: Theory and measurement*. Mahwah, NJ: Lawrence Erlbaum.
- Hox, J. J. (2010). Multilevel analysis: Techniques and applications (2nd ed.). New York, NY: Routledge.
- Judd, C. M., Westfall, J., & Kenny, D. A. (2017). Experiments with more than one random factor: Designs, analytic models, and statistical power. *Annual Review of Psychology*, 68, 1–25.
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach and inhibition. *Psychological Review*, 110, 265–284.
- Keltner, D., & Robinson, R. J. (1997). Defending the status quo: Power and bias in social conflict. *Personality and Social Psychol*ogy Bulletin, 23, 1066–1077.
- Kervyn, N., Yzerbyt, V. Y., Judd, C. M., & Nunes, A. (2009). A question of compensation: The social life of the fundamental dimensions of social perception. *Journal of Personality and Social Psychology*, 96, 828–842.
- Krueger, J. I. (2007). From social projection to social behaviour. European Review of Social Psychology, 18, 1–35.
- Krueger, J., & Clement, R. W. (1994). The truly false consensus effect: An ineradicable and egocentric bias in social perception. *Journal of Personality and Social Psychology*, 67, 596–610.

- Krueger, J., & Zeiger, J. S. (1993). Social categorization and the truly false consensus. *Journal of Personality and Social Psychology*, 65, 670–680.
- Lammers, J., Galinsky, A. D., Gordijn, E. H., & Otten, S. (2012). Power increases social distance. *Social Psychological and Personality Science*, 3, 282–290.
- Lee, F., & Tiedens, L. Z. (2001). Is it lonely at the top?: The independence and interdependence of power holders. *Research in Organizational Behavior*, 23, 43–91.
- Liviatan, I., Trope, Y., & Liberman, N. (2008). Interpersonal similarity as a social distance dimension: Implications for perception of others' actions. *Journal of Experimental Social Psychology*, 44, 1256–1269.
- Machunsky, M., Toma, C., Yzerbyt, V., & Corneille, O. (2014). Social projection increases for positive targets: Ascertaining the effect and exploring its antecedents. *Personality and Social Psychology Bulletin*, 40, 1373–1388.
- Magee, J. C., & Smith, P. K. (2013). The social distance theory of power. *Personality and Social Psychology Review*, 17, 158–186.
- Montepare, J. M., & Dobish, H. (2003). The contribution of emotion perceptions and their overgeneralizations to trait impressions. *Journal of Nonverbal Behavior*, 27, 237–254.
- Oldmeadow, J. A., & Fiske, S. T. (2010). Social status and pursuit of positive social identity: Systematic domains of intergroup differentiation and discrimination for high and low status groups. *Group Processes and Intergroup Relations*, 13, 425–444.
- Overbeck, J. R., & Droutman, V. (2013). One for all: Social power increases self-anchoring of traits, attitudes, and emotions. *Psychological Science*, 24, 1466–1476.
- Overbeck, J. R., & Park, B. (2001). When power does not corrupt: Superior individuation processes among powerful perceivers. *Journal of Personality and Social Psychology*, 81, 549–565.
- Robbins, J. M., & Krueger, J. I. (2005). Social projection to ingroups and outgroups: A review and meta-analysis. *Personality and Social Psychology Review*, 9, 32–47.
- Rucker, D. D., Dubois, D., & Galinsky, A. D. (2011). Generous paupers and stingy princes: Power drives consumer spending on self versus others. *The Journal of Consumer Research*, 37, 1015–1029.
- Schmid Mast, M. (2010). Interpersonal behavior and social perception in a hierarchy: The interpersonal power and behavior model. *European Review of Social Psychology*, 21, 1–33.
- Schmid Mast, M., Jonas, K., & Hall, J. A. (2009). Give a person power and he or she will show interpersonal sensitivity: The phenomenon and its why and when. *Journal of Personality and Social Psychol*ogy, 97, 835–850.
- Smith, P. K., & Trope, Y. (2006). You focus on the forest when you're in charge of the trees: Power priming and abstract information processing. *Journal of Personality and Social Psychology*, 90, 578–596.
- Stephan, E., Liberman, N., & Trope, Y. (2010). Politeness and psychological distance: A construal level perspective. *Journal of Personality and Social Psychology*, 98, 268–280.
- Sturm, R. E., & Antonakis, J. (2015). Interpersonal power: A review, critique, and research agenda. *Journal of Management*, 41, 136–163.

- Toma, C., Corneille, O., & Yzerbyt, V. (2012). Holding a mirror up to the self: Egocentric similarity beliefs underlie social projection in cooperation. *Personality and Social Psychology Bulletin*, 38, 1259–1271.
- Toma, C., Yzerbyt, V., & Corneille, O. (2010). Anticipated cooperation vs. competition moderates interpersonal projection. *Journal of Experimental Social Psychology*, 46, 375–381.
- Toma, C., Yzerbyt, V., & Corneille, O. (2012). Nice or smart? Task relevance of self-characteristics moderates interpersonal projection. *Journal of Experimental Social Psychology*, 48, 335–340.
- Toma, C., & Woltin, K. A. (2012). Motivational and contextual considerations concerning the social projection hypothesis. *Psychological Inquiry*, 23, 69–74.
- van Kleef, G., Oveis, C., Homan, A., van der Lowe, I., & Keltner, D. (2015). Power gets you high: The powerful are more inspired by themselves than by others. *Social Psychological and Personality Science*, 6, 472–480.
- van Kleef, G. A., Oveis, C., van der Löwe, I., LuoKogan, A., Goetz, J., & Keltner, D. (2008). Power, distress, and compassion: Turning a blind eye to the suffering of others. *Psychological Science*, 19, 1315–1322.
- Vorauer, J. D., & Ross, M. (1999). Self-awareness and transparency overestimation: Failing to suppress one's self. *Journal of Experimental Social Psychology*, 35, 415–440.
- Yzerbyt, V. Y. (2016). Intergroup stereotyping. Current Opinion in Psychology. doi:10.1016/j.copsyc.2016.06.009%3C/doi%3E
- Yzerbyt, V. Y., & Cambon, L. (2017). The dynamics of compensation: When ingroup favoritism paves the way for outgroup praise. *Personality and Social Psychology Bulletin*.
- Yzerbyt, V. Y., Provost, V., & Corneille, O. (2005). Not competent but warm...Really? Compensatory stereotypes in the Frenchspeaking world. *Group Processes and Intergroup Relations*, 8, 291–308.
- Zanna, M. P., & Hamilton, D. L. (1972). Attributes dimensions and patterns of traits inferences. *Psychonomic Science*, 27, 343–354.

Author Biographies

Claudia Toma is an associate professor of social psychology and organizational behavior at Solvay Brussels School of Economics and Management, Université libre de Bruxelles. Her research interests are in the area of social judgment and decision-making.

Vincent Yzerbyt is a full professor of social psychology at Université catholique de Louvain. His research is concerned with social cognition, attribution, stereotyping, and intergroup relations.

Olivier Corneille is a full professor of social psychology at Université catholique de Louvain. His main research interests are social cognition, evaluative learning, attitude formation, and the psychology of eating.

Stéphanie Demoulin is a professor of social psychology at Université catholique de Louvain. Her main research interests are social cognition, infrahumanization, negotiation, and intergroup relations.

Handling Editor: Gerben van Kleef