

"This is the peer reviewed version of the following article: Scholl A., Sassenberg K., Ellemers N., Scheepers D.T. & De Wit F.R.C. (2018), Highly identified powerholders feel responsible: The interplay between social identification and social power in groups, *British Journal of Social Psychology* 57: 112-129., which has been published in final form at <https://doi.org/10.1111/bjso.12225>. This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for Use of Self-Archived Versions."

Highly identified power-holders feel responsible:

The interplay between social identification and social power within groups

Annika Scholl ^a, Kai Sassenberg ^{a,b}, Naomi Ellemers ^c, Daan Scheepers ^d, & Frank de Wit ^e

^a Leibniz-Institut für Wissensmedien, Germany

^b University of Tübingen, Germany

^c University of Utrecht, The Netherlands

^d Leiden University, The Netherlands

^e Melbourne Business School, Australia

Word count: 6.610

Author note: Please address correspondence to Annika Scholl, Leibniz-Institut für Wissensmedien, Schleichstr.6, D-72076 Tübingen, Germany; Fon: +49 70 71 979 257, Fax: +49 70 71 979 200; E-mail: a.scholl@iwm-tuebingen.de.

Acknowledgements: We thank Philip Huber for his help in data collection for Study 1.

Running head: POWER AND SOCIAL IDENTIFICATION

Highly identified power-holders feel responsible:

The interplay between social identification and social power within groups

Word count: 6.734

Abstract

Power relations affect dynamics within groups. Power-holders' decisions not only determine their personal outcomes, but also the outcomes of others in the group that they control. Yet, power-holders often tend to overlook this responsibility to take care of collective interests. The present research investigated how social identification—with the group to which both the powerful and the powerless belong—alters perceived responsibility among power-holders (and the powerless). Combining research on social power and social identity, we argue that power-holders perceive more responsibility than the powerless when strongly (rather than when weakly) identifying with the group. A study among leaders and an experiment supported this, highlighting that although power-holders are often primarily concerned about personal outcomes, they do feel responsible for considering others' interests when these others are *included* in the (social) self.

(132 words)

Keywords: social identity, social identification, social power, responsibility, construal of power

Highly identified power-holders feel responsible:

The interplay between social identification and social power within groups

Power-holders in governments and organizations frequently make decisions with far-reaching consequences that not only affect their personal welfare, but have broader implications. This is the case, for instance, when deciding about large-scale investments or organizational restructurings. Situations like these call for power-holders who do not only consider their personal interests (e.g., achieving individual benefits), but also take the interests of the collective to be affected by their decisions into account—be it society, their organization, or their team. In short, these decisions require power-holders to perceive *responsibility* for taking care of broader (group-level) goals, such as collective concerns and others' outcomes.

Power-holders perceiving responsibility tend to make fairer, more informed decisions (e.g., they better consider others' advice; De Wit, Scheepers, Ellemers, Sassenberg, & Scholl, 2017), which can motivate those low in power and boost collective success (see, e.g., Chen, Lee-Chai, & Bargh, 2001; De Hoogh & den Hartog, 2008; Maner & Mead, 2010). Yet, power-holders are, in fact, often tempted to overlook their responsibility (e.g., Chen et al., 2001; Sassenberg, Ellemers, & Scheepers, 2012; Scheepers, Ellemers, & Sassenberg, 2013). Elevated power rather seems to evoke a focus on personal benefits or desires (Lammers, Galinsky, Dubois, & Rucker, 2015) and hinders power-holders from perceiving responsibility to tend to collective concerns and others' welfare.

As the positive implications of power-holders' perceived responsibility for subsequent behavior are already well-established, the challenge now lies in identifying *situational preconditions* that stimulate power-holders to better recognize their responsibility.

Considering power in collective contexts, social identification should play a key role in shaping the responsibility that power-holders perceive. Power-holders and the powerless often

belong to one-and-the same social group, such as a society, an organization, or a team, in which they have different hierarchical positions. In these contexts, the degree to which power-holders *identify* with the joint group—instead of conceiving of their personal concerns and outcomes as being detached from those of others—may impact their perceived responsibility to take care of this group and its members.

To investigate this possibility, the present research brings together research on social power (Guinote, 2007a; Keltner, Gruenfeld, & Anderson, 2003) and social identity (Brewer, 1979; Tajfel & Turner, 1979, 1986; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Prior research connecting these two lines has, so far, focused only on the *powerless*. This work demonstrated, for instance, that powerless people's social identification with the group renders them more likely to support and follow a power-holder (especially when this power-holder seems to embody and advance joint group goals; see Haslam, Reicher, & Platow, 2011). Complementing this prior work, the current research focuses on how social identification of the *powerful* impacts their responsibility for the achievement of group-goals.

We propose that a power-holder should perceive more responsibility than a low-power person if s/he strongly (compared to weakly) identifies with the joint group—because strong social identification implies that the group and its members are considered as being part of the (social) self (Tajfel & Turner, 1979; Turner et al., 1987). The present research studied this interplay between social identification and social power. In doing so, we sought to demonstrate that power-holders—who often focus primarily on personal benefits—may perceive more responsibility when their self is dominated by the *social identity* they share with those low in power.

When and how social power promotes attention to one's responsibility

Social power implies asymmetric control over one's own and others' situation by affording access to important resources (e.g., rewards, money, social appreciation; Fiske & Berdahl, 2007). Elevated power provides relative independence from others, whereas having

low power means that one's situation and outcomes strongly depend on the power-holder. High power can be understood as implying opportunities—that is, greater freedom to make decisions and pursue one's goals—and/or as implying responsibilities—that is, a privilege and inner obligation to make decisions and take care of things that others cannot take care of (e.g., the achievement of collective goals or others' welfare; Chen et al., 2001; Fiske & Berdahl, 2007; Sassenberg et al., 2012; Scheepers et al., 2013; Zhong et al., 2006). Power-holders are usually well aware of their opportunities, whereas they often tend to neglect their responsibility (see Sassenberg et al., 2014).

Resulting from the relative independence a power-position affords, being powerful activates approach tendencies and a focus on rewards, while being powerless promotes inhibition tendencies and a focus on threats and punishments (Keltner et al., 2003). A similar argument has been put forth by the Situated Focus Theory of Power (Guinote, 2007a): because power-holders are more independent from others, they should be better at focusing on what is relevant in a given situation—that is, on accessible constructs, usually being their personal goal or agenda. Conversely, the powerless depending on others are more distracted by concerns about external factors (e.g., how others evaluate them; Guinote, 2007b, 2007c, 2008; Scholl & Sassenberg, 2014, 2015). Accordingly, this perspective argues that power-holders better adapt to accessible goals (for evidence see Guinote, Weick, & Cai, 2012)—with these goals usually being personal.

Indeed, compared to those low in power, power-holders frequently behave more in line with their personal agenda (Lammers et al., 2015): they are more inspired by their own contributions (van Kleef, Oveis, Homan, van der Löwe, & Keltner, 2015), respond more to personal needs (Guinote, 2010), and more authentically and directly express their feelings, traits, and opinions (Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008; Kraus, Chen, & Keltner, 2011). At the same time, power-holders devalue others' contributions (Kipnis, 1972), are less affected by others' suffering (van Kleef et al., 2008), show less neurological

responses to others' actions (Hogeveen, Inzlicht, & Obhi, 2014), and tend to dehumanize others (Gwinn, Judd, & Park, 2013; Lammers & Stapel, 2011). In short, power-holders are often concerned about personal interests, neglecting their responsibility for broader (group-level) goals.

At times, however, power-holders do seem to be aware of their responsibility. Power-holders (compared to the powerless) show stronger signs of responsibility when they generally care about others (Chen et al., 2001; Côté et al., 2011; DeCelles, de Rue, Margolis, & Ceranic, 2012; Gordon & Chen, 2013), are directed towards specific others (Galinsky, Magee, Rus, Rothman, & Todd, 2014; Overbeck & Park, 2006), or come from a cultural background emphasizing others' value (Torelli & Shavitt, 2010; Zhong et al., 2006). This suggests that power-holders perceive responsibility especially when other people are *relevant* for their personal goals or agenda.

Going beyond such (mostly) stable preconditions, we assume that the social situation, more specifically, the group context, can make others relevant to the power-holder. First evidence stems from Karremans and Smith (2010), who showed that when a specific other person is *personally close* to a power-holder—and, thus, likely *included* in the power-holder's self (Aron, Aron, & Smollan, 1992)—the power-holder behaves more responsibly towards this close other (i.e., more forgiving). Accordingly, people seem to be able to include specific close others (e.g., a good friend or significant other) into their conception of the self. As Situated Focus Theory (Guinote, 2007a) would suggest, especially those high (rather than low) in power seem to adapt to this. Namely, if they have included another person into their self, power-holders show more forgiveness than the powerless (Karremans & Smith, 2010).

We take this reasoning one step further, arguing that similar processes play a role at the level of joint membership to a (self-relevant) group. Specifically, such processes should even extend to others who are *not* personally known to the power-holder. When being strongly identified with a group, people include *many* other people, namely the other group

members, into their (social) self—even without knowing who exactly these others are, or whether they like the others (Tajfel & Turner, 1979; see also Ellemers & Haslam, 2011; Haslam & Ellemers, in press). Such a more symbolic and abstract inclusion of others into the social self may have implications for power-holders' responsibility, as we outline in the following.

How social identification facilitates the perception of responsibility

Power research has, so far, rarely considered how the group context affects *power-holders* (but see, e.g., Ellemers, De Gilder, & Haslam, 2004; Haslam et al., 2011; for its impact on the *powerless*), and specifically, their responsibility (for an exception see Scheepers et al., 2013). This is surprising, considering that power-holders may often have control over the situation of others with whom they do share a joint group membership—be it in the case of leaders and members of an organization, politicians and their party members, or prototypical representatives of a larger social category. Here, the power-holder and the less powerful person(s) belong to one-and-the same social group—which may affect responsibility among power-holders within that group.

When perceiving a group membership as a central part of their self-concept, individuals act in favor of this group's interest and welfare. The more value a person attaches to that group—in other words, the higher his or her *social identification*—the stronger the willingness and motivation to engage in favor of that group (Ashmore, Deaux, McLaughlin-Volpe, 2004; Ellemers et al., 2004; van Knippenberg, 2000). This implies a shift of the 'self' from a personal identity ("I" as an individual person that differs from others) to a *social* identity ("we" belong together and care about joint outcomes). This shift not only means that other members become more relevant to a person, but rather that this person's personal interests move to the background, while the interests of the group and its members become the main focus (Brewer, 1979; Ellemers, 2012; Tajfel & Turner, 1979; Turner et al., 1987).

Applying this to the domain of power, social identification with a joint group—to which the powerful and the powerless belong—has been shown to increase the willingness of *low-power* people to support and comply with their power-holder's authority (Haslam & Ellemers, 2011). In other words, highly identified low-power individuals are generally happy to follow their leader; in turn, they seem unlikely to perceive a lot of responsibility to take care of the group's outcomes themselves, but are rather willing to vest this responsibility to their power-holder.

Complementing this research, we focus on the *power-holder*—for whom the effects of identification should be different. For a power-holder, high social identification should enhance responsibility to take care of the group and its outcomes. As outlined above, power-holders should better respond to what is accessible in a situation (compared to the powerless; Guinote, 2007)—usually, when the personal self is salient, accessible personal goals. When they are highly identified with a group, however, this should imply a stronger focus on ‘*social*’ goals—that is, a concern about the group and its members who are part of the (social) self. Accordingly, highly identified power-holders should perceive more responsibility than highly identified low-power members.

Taken together, power-holders should perceive more responsibility than those low in power when their identification with the group is high, not when their identification is low (in which case the effect of power should be lower or even reverse; *main hypothesis*). In short, social identification should moderate the impact of power on responsibility. Support for this would contribute to a rising interest in the interplay between the personal self (here, individuals' high- or low-power) and the social self (as member of a collective; Jans, Postmes, van der Zee, 2011; Postmes & Jetten, 2006). Moreover, such findings would critically extend power research—which often examined responsibility-related tendencies towards a single, relatively unspecified other person (see Sassenberg et al., 2014), rather than other people who may, in fact, belong to the same collective as the power-holder (for exceptions, see, e.g.,

Maner & Mead, 2010; Scheepers et al., 2013). In doing so, we seek to show that, just as power-holders respond more to personal goals (Guinote, 2007), they should do the same for goals at the *group*-level. Bringing together these two domains would suggest that power-holders' higher concern about their agenda (the 'self') may not preclude responsibility to take care of collective outcomes—provided that others are *included* in power-holders' (social) self.

The present research

Two studies, a study via MTurk and an experiment, tested our prediction on the interplay between power and social identification. In Study 1, real-life power-holders (i.e., leaders) reported their experienced power, social identification with their organization, and perceived responsibility. Study 2 experimentally induced identification and power in a controlled lab setting. Participants recalled an experience in which they were either happy (high identification) or angry (low identification) to be a member of a group they belonged to (Kessler & Hollbach, 2005); participants then anticipated working on a dyadic task with a partner (i.e., a member of the same group used to induce identification), received a high- or low power role (cf. Galinsky et al., 2003; Guinote, 2007b), and indicated their responsibility towards their partner.

We determined data collection start and end points as well as the ideal sample sizes for both studies prior to data collection ($N = 100$ for Study 1, $N = 25$ per cell for Study 2, as a standard procedure at the time); to ensure against potential drop-outs or cancellations, as many participants as possible were recruited for the scheduled data collection period. Beyond our main dependent measure responsibility, all studies assessed perceived opportunity to explore potential effects on this other facet of social power (Sassenberg et al., 2012; Scheepers et al., 2013).¹

Study 1: Social identification among power-holders in organizations

¹ Both studies captured additional exploratory measures as indicated in the Supplemental Material.

This study tested our prediction under realistic conditions among power-holders in organizational contexts. We focused on experienced power at work among *leaders*, because leaders likely do possess some power, though of varying degree (e.g., across job types, organizational contexts, levels of leadership position; e.g., Guinote, 2008; DeWall, Baumeister, Mead, & Vohs, 2011; Magee, Gruenfeld, Keltner, & Galinsky, 2005, Weick & Guinote, 2008; see also Maner & Mead, 2010). This also enabled us to examine identification with a collective to which people actually do belong, namely, their organization. We expected that the more power leaders experience, the more responsibility they perceive—provided that they highly (rather than lowly) identify with their organization. Beyond responsibility, we assessed leaders' attitudes towards misusing power for own ends as exploratory indicator of a potential longer-term implication of responsibility at work.

Method

Design and participants. One hundred and nineteen leaders participated (53 female, 66 male; $M_{age} = 32.8$, $SD = 10.80$; range: 20-69) from lower (55.5 %), middle (36.1 %) and upper management (8.4 %), with, on average, 12.47 ($SD = 16.74$) subordinates they supervised. The data of two additional participants were excluded because these participants did not fulfill the pre-defined study requirements of being a leader (i.e., occupying a leadership position and/or supervising at least one subordinate); results are almost identical when including these two cases.

Procedure and measures. Participants occupying a leadership position were invited to fill in a 10-min online survey on “organizational identification” via MTurk. First, to make their power salient, participants indicated their job function, number of subordinates, and employee status. Though all participants occupied a leadership position, we expected their extent of power to vary across job types, organizational contexts, and hierarchical position; we assessed their *experienced power* at work with five items (e.g., “To what degree do you

have financial scope over salary or bonus allocation for staff?"; 1 – *not at all* to 7 – *a great deal*, $\alpha = .82$; See, Morrison, Rothman, & Soll, 2011).

Second, we measured *social identification* with the organization (six items; e.g., "When someone criticizes my organization, it feels like a personal insult", $\alpha = .90$, Mael & Ashforth, 1992). Third, participants indicated their attitudes towards *misuse of power* to own ends (e.g., "Given enough opportunities, anyone can be corrupted"; seven items from Lee-Chai et al., 2001; $\alpha = .73$), their *perceived responsibility* regarding the decisions they generally make in their job (e.g., "In general, when making decisions, I feel partly responsible for others' situation."; Scholl, Sassenberg, Scheepers, Ellemers, & de Wit, 2016; Scheepers et al., 2013; $\alpha = .60$), and *perceived opportunity* (e.g., "In general, when making decisions, I can see what the possibilities are."; Scholl et al., 2017; $\alpha = .67$; all on scales from 1–*strongly disagree* to 7–*strongly agree*).²

Results

Perceived responsibility. We predicted that the more power leaders experience, the more responsibility they perceive—provided that they highly (rather than lowly) identify with their organization. In short, we expected an experienced power \times identification interaction. Multiple regression analyses tested this. In the first step, we regressed perceived responsibility on experienced power ($\beta = -.02$, $p = .849$) and identification ($\beta = .38$, $p < .001$; all predictors z -standardized), $F(2,116) = 9.31$, $p < .001$, $\text{adj. } R^2 = .12$. In the second step, we entered the experienced power \times identification interaction, which was significant ($\beta = .35$, $p < .001$), $F(3,115) = 13.03$, $p < .001$, $\Delta R^2 = .12$;

Unpacking the interaction, simple slope analyses (Aiken & West, 1991) demonstrated that, as expected, experienced power predicted more perceived responsibility ($\beta = .25$, $p =$

² As exploratory predictor, leaders also indicated their identification with their *department*; we did not consider this further in our analyses, because leaders often belong to several (sub-) departments at the same time; hence, it was not entirely clear which department each participant referred to. Identification with the department and with the organization were positively correlated, $r(119) = .39$, $p < .001$. Results for this predictor were similar to results for identification with the organization.

.017) when leaders were *highly* identified (+ 1 *SD*); in contrast, experienced power predicted less perceived responsibility ($\beta = -.41, p = .001$) when being *lowly* identified (-1 *SD*), see Figure 1.³

Auxiliary analyses for misuse of power. We assessed attitudes towards power misuse as indicator of potential longer-term implications of responsibility at work. Accordingly, we explored whether power and identification may conjointly predict attitudes towards power misuse, and whether this may be explained by perceived responsibility. An analogous regression analysis demonstrated that both experienced power ($\beta = .12, p = .197$) and identification ($\beta = -.16, p = .088$) descriptively, though not significantly, predicted *misuse of power*, $F(2, 116) = 1.88, p = .157, \text{adj. } R^2 = .02$. This was qualified by an experienced power \times identification interaction ($\beta = -.26, p = .006$), $F(3, 115) = 3.94, p = .010, \Delta R^2 = .06$. Experienced power predicted more favorable attitudes to power misuse ($\beta = .41, p = .004$) only when being *lowly* identified (-1 *SD*), not when being *highly* identified (+ 1 *SD*) ($\beta = -.08, p = .516$). Accordingly, (high) identification with the organization seemed to buffer the relation between experienced power and favorable attitudes towards power misuse.

Auxiliary analyses for moderated mediation. Combined with our main results, this suggests that when identifying highly (but not lowly) with the organization, leaders' experienced power is perceived more as responsibility—which may, in turn, predict less favorable attitudes towards power misuse. Following up on this, we explored a *moderated mediation model* with bootstrapping (Hayes, 2013; Model 7). Experienced power served as predictor, identification as moderator, responsibility as mediator, and power misuse as outcome. Similar to regression results, experienced power \times social identification predicted the mediator perceived responsibility (interaction: $B = .17, SE = .04, p < .001$; identification: $B = .29, SE = .05, p < .001$; power: $B = -.05, SE = .06, p = .380$); moreover, the mediator

³ This interaction remained when controlling for perceived opportunity (as another facet of power; $\beta = .32, p < .001$). Moreover, in line with research that identification can be a source of control (Fritsche, Jonas, & Fankhänel, 2008; here, power) experienced power and identification were significantly, but not too highly correlated (i.e., collinearity does not become an issue), $r(119) = .249, p = .006$.

perceived responsibility predicted the outcome, that is, less misuse of power ($B = -.55$, $SE = .10$, $p < .001$; power: $B = .09$, $SE = .06$, $p = .152$). Finally, the conditional indirect effects indicated that experienced power predicted less power misuse (via more perceived responsibility) only when identification was *high* ($B = -.09$, $SE = .04$), 95%-CI $[-.174; -.031]$; the reverse was true when identification was *low* ($B = .15$, $SE = .06$), 95%-CI $[.047; .298]$. In short, this supported (exploratory) moderated mediation.

Auxiliary analyses for perceived opportunity. Similar regression analyses showed that experienced power ($\beta = .28$, $p = .001$) positively predicted *perceived opportunity*, as did identification ($\beta = .32$, $p < .001$), $F(2,116) = 16.68$, $p < .001$, $\text{adj. } R^2 = .21$. Further, an experienced power \times identification interaction ($\beta = .23$, $p = .007$), $F(3,115) = 14.26$, $p < .001$, $\Delta R^2 = .05$, indicated that experienced power predicted more opportunity when leaders' identification was *high* ($\beta = .45$, $p < .001$), rather than *low* ($\beta = .03$, $p = .820$).

Discussion

This study provided first evidence that (experienced) power promotes responsibility when the person does identify with the collective to which others belong. The more power leaders experienced at work, the more responsibility they perceived—provided that they were highly identified with their organization; when they were lowly identified, this relation was even reversed. The results, thus, support our hypothesis for experienced power at work, promoting the external validity of findings and suggesting that social identification at the organizational level can uniquely contribute to power-holders' perceived responsibility.

Our auxiliary analyses suggest that, beyond the perception of responsibility, social identification may alter critical attitudes towards misusing power at work. Leaders are usually the ones who seek to influence followers to attain group goals; accordingly, they often do wield their power to advance their team's goals (unless they strive for personal gain, such as to maintain or extend their power; see Maner & Mead, 2011). In line with this, our findings suggest that only when being strongly identified with the organization did leaders' power

predict more perceived responsibility and, thereby, less (favorable attitudes towards) power misuse, whereas the reverse was true when being weakly identified. These results are merely exploratory and correlational; yet, they point towards an important potential longer-term implication of power-holders' responsibility in organizations.

Finally, experienced power also seemed to imply more perceived opportunity (replicating earlier research; e.g., Sassenberg et al., 2012). We observed that this was even stronger for highly identified individuals. This is a finding we did not anticipate and, accordingly, examined if this would replicate in the next study.

In sum, Study 1 indicated that how social power predicts perceived responsibility does depend on the level of *social identification* with the joint group to which the powerful and the powerless belong. Despite the clear advantages of examining power in realistic settings here, however, the data precludes any conclusions about causality. Moreover, because we recruited participants online, control over the data is limited (e.g., regarding all participants' leadership status or the impact of third variables, such as type of organization or profession). To resolve this, Study 2 manipulated power (to enable a direct comparison for people having low vs. high power) and induced (low vs. high) identification in a lab experiment. To resolve this, Study 2 manipulated power (to enable a direct comparison for people having low vs. high power) and induced (low vs. high) identification in a lab experiment. We, again, focused on perceived responsibility in this study; we did not assess power misuse here—because such attitudes likely represent a less meaningful, less variable indicator in a short-term experimental set-up.

Study 2: Social identification with a real group and assigned power roles

To test the prediction under controlled conditions, this study experimentally induced identification with an in-group participants belonged to (i.e., undergraduates' own generation; Kessler & Hollbach, 2005). Then, we implemented a well-established power role

manipulation (Galinsky et al., 2003; Guinote, 2007b) in a supposed dyadic task with a partner from their generation (i.e., the same in-group as used to induce identification).

Method

Design and participants. The study comprised a 2 (social identification: low vs. high) \times 2 (social power: low vs. high) between-participants design. One hundred fifteen undergraduates (75 female, 40 male; $M_{\text{age}} = 23.3$, $SD = 3.94$; range: 18-34) participated as part of a larger study package in return for 8 €. Participants were randomly assigned to conditions. We excluded three additional participants because they did not fulfill the pre-defined basic study requirements (i.e., age < 35 years, because the study was based on “young people of your generation” as salient social category); note that analyses including these $N = 3$ yield highly similar or even stronger results.

Procedure. We invited participants to the lab for a study on “collaboration between young people”. They completed two allegedly unrelated parts on (1) events in young people’s lives and (2) cooperation among young people on an art gallery task. In the first part, participants completed the *identification manipulation* via recall, following the procedure by Kessler and Hollbach (2005). We induced low vs. high identification with their ‘generation of young people’ as an in-group they factually belonged to. For this purpose, participants recalled a specific situation within the last year involving others from their generation. Specifically, they recalled and described a situation in which they had been either happy (high identification) or angry (low identification) to belong to their generation. After writing up a short essay about this situation, they completed four identification items (e.g., “Being a young person is important to me”, scale 1-*agree not at all* to 7-*completely agree*; $\alpha = .74$).

In the second part, we administered the *power manipulation* (Galinsky et al., 2003; Guinote, 2007). Participants learned they would work on an alleged ‘team task’ with a partner from their generation (i.e., a member of the previously activated in-group; for similar procedures, see Postmes & Spears, 2002; Postmes, Spears, & Lea, 2002; Sassenberg & Boos,

2003; Sassenberg & Postmes, 2002; Spears, Lee, & Lea, 1990). Following standard role assignment procedures, this ‘team task’ served to induce power, but did not take place in the end. After completing an alleged leadership questionnaire, participants were, in fact, randomly assigned to be the manager (high-power) or assistant (low-power) of an art gallery. The joint task of the manager–assistant dyad would be to organize an art exhibition together. The assistant’s (alleged) task was to follow instructions and contribute ideas. The manager’s task (supposedly) implied structuring the task and evaluating the assistant by determining how to distribute a bonus money of 3€ within the dyad. In doing so, power implied (anticipated) asymmetric control over resources. Participants completed three power items (e.g., “In the following task, I will be in charge”; $\alpha = .92$; 1–*agree not at all* to 7–*completely agree*).

Before completing their ‘first gallery task’ together, participants indicated how they expected the collaboration to turn out. This served as our measure of *perceived responsibility*, similar to Study 1 (e.g., “During the collaboration, I will feel partly responsible for the others’ situation.”; $\alpha = .66$).⁴ Again, we assessed *perceived opportunity* as exploratory outcome (“During the collaboration, I will have more possibilities to pursue my goals.”; $\alpha = .75$; scales ranging from 1 – *disagree completely* to 7 – *agree completely*). Participants then completed demographic measures. Afterwards, neither the announced team task nor the distribution of bonus money took place; participants were carefully debriefed, thanked, and compensated.

Results

Manipulation checks. For self-reported identification, high identification participants did not indicate that their generation was more important to them than the low identification participants ($M_{\text{high}} = 5.57$, $SD = 1.10$; $M_{\text{low}} = 5.47$, $SD = 1.11$), $t(113) = .484$, $p = .629$. Hence,

⁴ Originally, 5 additional items were assessed to capture responsibility in both studies; in Study 1, adding these 5 items to the perceived responsibility scale reported in the paper produced highly similar results (see Supplemental Material). In Study 2, the reliability of a complete 10-item responsibility scale was so low that we could not include all items as planned into one internally consistent scale. We, thus, ran an exploratory factor analysis for each study and used the respective 5 items with the highest loadings on each respective factor to compute an internally consistent and content-wise meaningful measure of this concept; more information on all 10 items and the factor loadings is included in the Supplemental Material.

this test does not yet allow for conclusions if our manipulation worked as intended (even though it did in the studies by Kessler & Hollbach, 2005)—potentially because our items were framed more generally, rather than situationally. Indeed, such explicit checks have been criticized for different reasons (e.g., Kidd, 1976; Kühnen, 2010), one of them being that participants are not always able to explicitly articulate the effect a manipulation has on them (Nisbett & Wilson, 1977). To make sure our manipulation did work as intended, we content-analyzed the essays participants composed for the identification manipulation as an indirect, potentially more sensitive check. This served to investigate how much their recalled situations did reflect high vs. low identification situations, respectively.

To do so, we used the LIWC2007 (Linguistic Inquiry and Word Count software; Pennebaker, Francis, & Booth, 2007). It calculates the degree to which participants use specific, pre-defined *word categories* in text. For the present study, we analyzed the degree to which participants used ‘*inclusion*’-related words (e.g., words like “we”, “include”) in their essays—as the word category most closely reflecting social identification. If the identification manipulation was successful, participants should have used more such ‘*inclusion*’-related words in the high than in the low identification condition. This was, indeed, the case, both for the *absolute* frequency of ‘*inclusion*’-related words ($M_{\text{high}} = 8.83, SD = 2.87; M_{\text{low}} = 6.64, SD = 2.55$), $t(111) = 4.27, p < .001$, and the *relative* use of ‘*inclusion*’-related words (divided by total number of words in the essays; $M_{\text{high}} = .17, SD = .16; M_{\text{low}} = .08, SD = .05$), $t(66.265) = 4.20, p < .001$ (total number of words used: $M_{\text{high}} = 74.77, SD = 36.02; M_{\text{low}} = 105.26, SD = 52.83, t(98.98) = 3.59, p = .001$); *dfs* result from a significant Levene’s test of variances. Importantly, this check suggests that our identification manipulation likely did work as intended; note that power was manipulated only after identification.

For the power manipulation check, results yielded a main effect of Power, $F(1,111) = 372.41, p < .001, \eta_p^2 = .77$; high-power participants ($M = 5.95, SD = .67$) experienced more power than low-power participants ($M = 2.93, SD = .98$). There was no main effect of

Identification and no Power \times Identification interaction ($F_s < 1, p_s > .357$). This suggests that the power manipulation was successful.

Perceived responsibility. We expected that high (compared to low) power participants would perceive more responsibility when identification was high (rather than low). A 2 (Power) \times 2 (Identification) ANOVA yielded no main effect of Identification ($F < 1, p = .884$), but a main effect of Power, $F(1,111) = 44.94, p < .001, \eta_p^2 = .29$ ($M_{\text{low-power}} = 4.95, SD = .84; M_{\text{high-power}} = 5.88, SD = .67$), qualified by the predicted Power \times Identification interaction, $F(1,111) = 7.76, p = .006, \eta_p^2 = .07$. Supporting the main hypothesis, simple comparisons indicated that high-power participants ($M = 6.08, SD = .56$) perceived more responsibility than low-power participants ($M = 4.77, SD = .75$) when identification was *high*, $F(1,111) = 45.40, p < .001, \eta_p^2 = .29$. This was to a lesser extent the case when identification was *low* ($M_{\text{low-power}} = 5.14, SD = .90; M_{\text{high-power}} = 5.68, SD = .72$), $F(1,111) = 7.61, p = .007, \eta_p^2 = .06$, see Figure 2.⁵

Auxiliary analyses for perceived opportunity. Results showed a main effect of Power, $F(1,111) = 38.51, p < .001, \eta_p^2 = .26$ ($M_{\text{low-power}} = 4.04, SD = .94; M_{\text{high-power}} = 5.03, SD = .77$), but no main effect of Identification, $F(1,111) = 2.26, p = .136, \eta_p^2 = .02$, and no interaction ($F < 1, p = .466$). Accordingly, power increased the opportunity people perceived— independent of their level of identification.

Discussion

This study replicated findings from Study 1 in an experimentally controlled setting. Power-holders felt more responsible than the powerless especially when they highly identified with the group (here, their generation of young people)—more so than when being lowly identified with this group. In contrast to Study 1, power here also promoted perceived responsibility when identification was low; yet, as expected, this effect was less strong than when identification was high.

⁵ Again, controlling for perceived opportunity as the other facet of power did not meaningfully alter this interaction, $F(1,110) = 7.23, p = .008, \eta_p^2 = .06$.

Again, our exploratory results suggested that power predicts opportunities, in line with the idea that people often associate power with opportunity (e.g., Sassenberg et al., 2012); in contrast to Study 1, this was independent of identification. Similarly, interaction patterns for responsibility in Study 1 and 2 differed for low identifiers: among low identifiers in Study 1, experienced power predicted even less responsibility, whereas in Study 2, power only predicted responsibility less strongly for low (than for high) identifiers. Though this remains speculative, this differential pattern across studies might be due to the lower control over other factors in the setting of Study 1 (compared to the power-role induction in Study 2). In a (likely) more dynamic work environment, leaders' perception of opportunities may depend more on other factors beyond their experienced power (such as identification with their team); for instance, highly (rather than lowly) identified leaders may be more motivating (see Haslam, Reicher, & Platow, 2011) or more engaged, potentially evoking more support from their followers and organization—all of which may contribute to more perceived opportunities at work. In contrast, experimental power settings (Study 2) afford only momentary power over one follower's situation; accordingly, the opportunities associated with high (vs. low) power may be more obvious here, irrespective of other factors (e.g., social identification). Similarly, in dynamic work contexts, leaders lowly identifying with their team may, over time, learn to focus more on personal outcomes (e.g., getting a promotion) and lower their sensed responsibility for their team; this may be less likely to occur in a shorter, more clearly defined task setting in the lab. These ideas are certainly tentative, but could be tested more directly in future studies.

General discussion

Power-holders are often the ones who make decisions with potential large-scale implications, both for themselves and others within their collective. While power-holders are usually more focused on the 'self' (i.e., personal desires and benefits; Lammers et al., 2015), , at times, power-holders may also show a greater concern for others. The present research

sought to shed light onto specific *situational preconditions* within the group context that may help power-holders to perceive responsibility to take care of broader (collective) outcomes. Building upon social identity theory, we proposed that those high in power feel more responsible than those low in power when identifying strongly (rather than weakly) with the collective in which they possess power. Two studies supported this.

The results have implications for power as well as social identity research. In terms of research on the consequences of social power for individuals' concern for others, previous studies demonstrated a positive impact of traits (e.g., communal orientation, Chen et al., 2001; empathic concern, Côté et al., 2011; moral identity, DeCelles et al., 2012; other-focus, Gordon & Chen, 2013), situational goals (Galinsky et al., 2014; Overbeck & Park, 2006), and the personal relevance of a *specific* close other to the power-holder (i.e., relational commitment, Karremans & Smith, 2010).

Our research builds upon this idea and goes beyond prior findings, showing that a shared *social identity* can render many (potentially unknown) others—here, the group and all its low power in-group members—relevant to the power-holder by means of (high) social identification. Interestingly, our results suggest that the heightened concern about the personal self that high (vs. low) power usually activates (e.g., Lammers et al., 2015) may also be effective for the *social* self: when the power-holder highly identifies with this social self and, accordingly, integrates others into the self, this power-holder seems also more concerned with taking care of the group's and these others' welfare—in short, perceives more responsibility.

Notably, we tested predictions in a 'real-life' and a controlled experimental setting using well-established measures and procedures. Yet, the present research has some clear limitations. First, both studies relied on relatively small samples. Second, we manipulated social identification in Study 2 rather indirectly via recalled emotions; this is a validated approach to influence current levels of social identification (Kessler & Hollbach, 2005), yet, our manipulation may thus have confounded emotion (e.g., anger towards the in-group) with

identification. Third, both studies relied on self-reported responsibility. To address the first and second aspect, future studies should seek to replicate our findings with larger samples and more direct identification manipulations (e.g., using minimal group paradigms and bogus feedback; Faddegon, Scheepers, & Ellemers, 2008; Woltin & Sassenberg, 2015).

To address the third aspect, findings of Study 1 do suggest that social identification may also prevent power-holders from being ready to misuse their power at others' expense. We here only considered *attitudes* towards power misuse as a valid, but rather indirect indicator of potential longer-term implications of perceived responsibility. Future research should, thus, examine actual behavioral implications, such as letting power-holders distribute actual resources between themselves and their followers (e.g., a real bonus; Giessner, van Knippenberg, van Ginckel, & Sleebos, 2013) or investigate how much they consider each individual follower's input (e.g., individuation while communicating with followers; Overbeck & Park, 2001; or taking followers' advice into account; de Wit et al., 2017).

Moreover, one may wonder if high power, low power, or both are driving the effects. Situated Focus Theory (Guinote, 2007) suggests that *high* power (not low power) should do so—because high-power people should more flexibly adapt to their current level of identification (just as they better adapt to personal goals when the personal self is salient; e.g., Lammers et al., 2015). Moreover, social identification does promote tendencies for the group's sake especially among self-centered people (e.g., individualists; not among generally group-oriented prosocials; de Cremer & van Vugt, 1999). Accordingly, (high vs. low) identification should facilitate responsibility especially among power-holders (rather than the powerless).⁶

For the social identity approach, our findings add to an emerging body of research on the interplay between personal and social self (Jans et al., 2011; Postmes & Jetten, 2006).

⁶ Exploring this by meta-analytically combining results from both studies supported this: high (vs. low) identification led to more responsibility among those high in power (mean effect size $r=.36$, $p=.009$), but not those low in power ($r=-.03$, $p=.302$).

Importantly, to the best of our knowledge, we investigated for the first time how power *within* groups and identification with these groups affect group members' social perception—especially among *power-holders*. Social identification may be especially useful to promote responsibility among those *high* in power (rather than those low in power; see Footnote 6); accordingly, in some situations, social identification may differentially affect people's reactions—depending on their level of power within the group, but also depending on other individual-level features (e.g., Jans et al., 2011).

Finally, the present research has practical implications. In organizations, many established interventions aim at increasing identification with the team or organization—for instance, to promote helping in times of need. By connecting social identification to (in-group) power relations, our results suggest that such interventions may be especially useful to promote responsibility among those holding (some amount of) power. Interventions for followers, for instance, seek to increase identification and goal setting by means of joint goal setting between leaders and followers (Ellemers et al., 2004; Haslam, Platow, & Reicher, 2010); similar approaches might be effective for those high in power, which remains to be tested in future research. As power-holders' responsibility-related tendencies predict positive outcomes for the team and organization (e.g., motivation and success; De Hoogh & Den Hartog, 2008), this may benefit team members as well as the collective (e.g., organization) as a whole.

To conclude, the current research studied the interplay between power and the social self. Power-holders' heightened focus on the (often personal) self can also have socially beneficial effects, namely, when power-holders identify strongly with a joint group to which they and the powerless belong—that is, when the *social* self is relevant. In such cases, power-holders (vs. the powerless) are particularly likely to recognize the responsibility their power affords. This makes them more inclined to take care of broader goals and may even tempt them less to misuse power at others' expense.

References

- Aiken, L.S., and West, S.G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Aron, A., Aron E. N., & Smollan, D. (1992). Inclusion of other in the self-scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, *63*, 596-612.
- Ashmore, R. D., Deaux, K., & McLaughlin-Volpe, T. (2004). An Organizing Framework for Collective Identity: Articulation and Significance of Multidimensionality. *Psychological Bulletin*, *130*, 80-114. doi:10.1037/0033-2909.130.1.80
- Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological Bulletin*, *86*(2), 307-324. doi:10.1037/0033-2909.86.2.307
- Chen, S., Lee-Chai, A. Y., & Bargh, J. A. (2001). Relationship orientation as a moderator of the effects of social power. *Journal of Personality and Social Psychology*, *80*, 173–187. doi: 10.1037/0022-3514.80.2.173
- Côté, S., Kraus, M. W., Cheng, B. H., Oveis, C., van der Löwe, I., Lian, H., & Keltner, D. (2011). Social power facilitates the effect of prosocial orientation on empathic accuracy. *Journal of Personality and Social Psychology*, *101*, 217–232. doi: 10.1037/a0023171
- DeCelles, K. A., DeRue, D. S., Margolis, J. D., & Ceranic, T. L. (2012). Does power corrupt or enable? When and why power facilitates self-interested behavior. *Journal of Applied Psychology*, *97*, 681–689. doi: 10.1037/a0026811
- De Cremer, D., & Van Vugt, M. (1999). Social identification effects in social dilemmas: A transformation of motives. *European Journal of Social Psychology*, *29*, 871-893.
- De Hoogh, A. H. B., & Den Hartog, D. N. (2008). Ethical and despotic leadership, relationships with leader's social responsibility, top management team effectiveness and subordinates' optimism: A multi-method study. *The Leadership Quarterly*, *19*, 297–311.

doi: 10.1016/j.leaqua.2008.03.002

DeWall, C. N., Baumeister, R. F., Mead, N. L., & Vohs, K. D. (2011). How leaders self-regulate their task performance: evidence that power promotes diligence, depletion, and disdain. *Journal of Personality and Social Psychology, 100*, 47-65. doi: 10.1037/a0020932.

De Wit, F. C., Scheepers, D., Ellemers, E., Sassenberg, S. & Scholl, A. (2017). When do those in power take advice? The role of power as opportunity versus responsibility. *Journal of Organizational Behavior*. doi: 10.1002/job.2171

Ellemers, N. E. (2012). The group self. *Science, 336*, 848-852. doi:10.1126/science.1220987

Ellemers, N., De Gilder, D., & Haslam, S.A. (2004). Motivating individuals and groups at work: A social identity perspective on leadership and group performance. *Academy of Management Review, 29*, 459-478.

Ellemers, N., & Haslam, S.A. (2011). Social identity theory. In: P. van Lange, A. Kruglanski, & T. Higgins (Eds.). *Handbook of theories of social psychology* (pp. 379-398). London: Sage.

Fiske, S. P., & Berdahl, J. (2007). *Social power*. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles* (2nd Ed., pp. 678–692). New York: Guilford.

Galinsky, A. D., Gruenfeld, D. H., & Magee, J. C. (2003). From power to action. *Journal of Personality and Social Psychology, 85*, 453–466. doi: 10.1037/0022-3514.85.3.453

Galinsky, A. D., Magee, J. C., Gruenfeld, D. H., Whitson, J. A., & Liljenquist, K. A. (2008). Power reduces the press of the situation: Implications for creativity, conformity, and dissonance. *Journal of Personality and Social Psychology, 95*, 1450–1466. doi: 10.1037/a0012633

Galinsky, A. D., Magee, J. C., Rus, D., Rothman, N. B., & Todd, A. R. (2014). Acceleration with steering: The synergistic benefits of combining power and perspective-taking. *Social Psychological and Personality Science, 5*, 627–635. doi:

10.1177/1948550613519685

- Gordon, A. M., & Chen, S. (2013). Does power help or hurt? The moderating role of self-other focus on power and perspective-taking in romantic relationships. *Personality and Social Psychology Bulletin*, *39*(8), 1097–1110. doi: 10.1177/0146167213490031
- Gruenfeld, D. H., Inesi, M. E., Magee, J. C., & Galinsky, A. D. (2008). Power and the objectification of social targets. *Journal of Personality and Social Psychology*, *95*, 111–127. doi: 10.1037/0022-3514.95.1.111
- Guinote, A. (2007a). Behavior variability and the Situated Focus Theory of Power. *European Review of Social Psychology*, *18*, 256-295. doi: 10.1080/10463280701692813
- Guinote, A. (2007b). Power affects basic cognition: Increased attentional inhibition and flexibility. *Journal of Experimental Social Psychology*, *43*, 685-697. doi: 10.1016/j.jesp.2006.06.008
- Guinote, A. (2007c). Power and goal pursuit. *Personality and Social Psychology Bulletin*, *33*, 1076-1087. doi: 10.1177/0146167207301011
- Guinote, A. (2008). Power and affordances: When the situation has more power over powerful than powerless individuals. *Journal of Personality and Social Psychology*, *95*, 237-252. doi: 10.1037/a0012518
- Guinote, A. (2010). In touch with your feelings: Power increases reliance on bodily information. *Social Cognition*, *28*, 110–121. doi: 10.1521/soco.2010.28.1.110
- Guinote, A., Weick, M., & Cai, A. (2012). Does power magnify the expression of dispositions? *Psychological Science*, *23*, 475-82. doi: 10.1177/0956797611428472.
- Gwinn, J. D., Judd, C. M., & Park, B. (2013). Less power = less human? Effects of power differentials on dehumanization. *Journal of Experimental Social Psychology*, *49*, 464-470. doi:10.1016/j.jesp.2013.01.005
- Haslam, S.A., Reicher, S.D., & Platow, M.J. (2011). *The new psychology of leadership:*

Identity, influence, and power. Psychology Press.

Haslam, S.A., & Ellemers, N. (2011). Identity processes in organizations. In: Schwartz, S.J., Luyckx, K., Vignoles, V.L. (Eds). *Handbook of identity theory and research, Volume 1, Structures and Processes* (pp. 715-744). New York: Springer.

Haslam, S.A., & Ellemers, N. (in press). Are groups more or less than the sum of their members? The moderating role of individual identification. *Behavioral and Brain Sciences*.

Hayes, A.F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis*. New York: Guilford Press.

Hogeveen, J., Inzlicht, M., & Obhi, S. S. (2014). Power changes how the brain responds to others. *Journal of Experimental Psychology: General*, *143*, 755–762.

Jans, L., Postmes, T., & Van der Zee, K. I. (2011). The induction of shared identity: The positive role of individual distinctiveness for groups. *Personality and Social Psychology Bulletin*, *37*, 1130-1141. doi:10.1177/0146167211407342

Karremans, J. C., & Smith, P. K. (2010). Having the power to forgive: When the experience of power increases interpersonal forgiveness. *Personality and Social Psychology Bulletin*, *36*, 1010–1023. doi: 10.1177/0146167210376761

Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, *110*, 265–284. doi: 10.1037/0033-295X.110.2.265

Kessler, T., & Hollbach, S. (2005). Group-based emotions as determinants of ingroup identification. *Journal of Experimental Social Psychology*, *41*, 677-685.
doi:10.1016/j.jesp.2005.01.001

Kipnis, D. (1972). Does power corrupt? *Journal of Personality and Social Psychology*, *24*, 33-41.

Kraus, M. W., Chen, S., & Keltner, D. (2011). The power to be me: Power elevates self-concept consistency and authenticity. *Journal of Experimental Social Psychology*, *47*,

974–980. doi: 10.1016/j.jesp.2011.03.017

Lammers, J., Galinsky, A. D., Dubois, D., & Rucker, D. D. (2015). Power and morality.

Current Opinion in Psychology, 6, 15–19. doi: 10.1016/j.copsyc.2015.03.018

Lammers, J., & Stapel, D. A. (2011). Power increases dehumanization. *Group Processes & Intergroup Relations*, 14, 113–126. doi:10.1177/1368430210370042

Lee-Chai, A. Y., Chen, S., & Chartrand, T. L. (2001). From Moses to Marcos: Individual differences in the use and abuse of power. In A. Y. Lee-Chai & J. A. Bargh (Eds.), *The use and abuse of power: Multiple perspectives on the causes of corruption* (pp. 57–74). New York, NY: Psychology Press.

Magee, J. C., Gruenfeld, D. H., Keltner, D. J., & Galinsky, A. D. (2005). Leadership and the psychology of power. In D. M. Messick & R. M. Kramer (Eds.), *The psychology of leadership: New perspectives and research* (pp. 275-293). Mahwah: Lawrence Erlbaum Associates.

Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 13, 103-123. doi: 10.1002/job.4030130202

Overbeck, J. R., & Park, B. (2006). Powerful perceivers, powerless objects: Flexibility of powerholders' social attention. *Organizational Behavior and Human Decision Processes*, 99, 227–243. doi: 10.1016/j.obhdp.2005.10.003

Pennebaker, J. W., Francis, M. E., & Booth, R. J. (2007). *Linguistic inquiry and word count: LIWC*. Austin, TX: LIWC.

Postmes, T., & Jetten, J. (2006). *Individuality and the group: Advances in social identity*. Sage.

Postmes, T., & Spears, R. (2002). Behavior online: Does anonymous computer communication reduce gender inequality? *Personality and Social Psychology Bulletin*, 28, 1073-1083.

- Postmes, T., Spears, R., & Lea, M. (2002). Intergroup differentiation in computer-mediated communication: Effects of depersonalization. *Group Dynamics: Theory, Research, and Practice*, 6, 3-16.
- Sassenberg, K., Ellemers, N., & Scheepers, D. (2012). The attraction of social power: The influence of construing power as opportunity versus responsibility. *Journal of Experimental Social Psychology*, 48, 550–555. doi: 10.1016/j.jesp.2011.11.008
- Sassenberg, K., Ellemers, N., Scheepers, D., & Scholl, A. (2014). "Power corrupts" revisited: the role of construal of power as opportunity or responsibility. In J.-W. van Prooijen & P. A.M. van Lange (Eds.), *Power, politics, and paranoia: Why people are suspicious of their leaders* (pp. 73-87). Cambridge, UK: Cambridge University Press.
- Scheepers, D., Ellemers, N., & Sassenberg, K. (2013). Power in group contexts: the influence of group status on promotion and prevention decision making. *The British Journal of Social Psychology*, 52, 238–54. doi: 10.1111/j.2044-8309.2011.02063.x
- Scholl, A., & Sassenberg, K. (2014). Where could we stand if I had...? How social power impacts counterfactual thinking after failure. *Journal of Experimental Social Psychology*, 53, 51-61. doi: 10.1016/j.jesp.2014.02.005
- Scholl, A., & Sassenberg, K. (2015). Better know when (not) to think twice: How social power impacts prefactual thought. *Personality and Social Psychology Bulletin*, 41, 159-170. doi:10.1177/0146167214559720
- Scholl, A., Sassenberg, K., Scheepers, D., Ellemers, N., & de Wit, F. (2017). A matter of focus: Power-holders feel more responsible after adopting a cognitive other-focus, rather than a self-focus. *British Journal of Social Psychology*, 56, 89–102. doi: 10.1111/bjso.12177
- See, K. E., Morrison, E. W., Rothman, N. B., & Soll, J. B. (2011). The detrimental effects of power on confidence, advice taking, and accuracy. *Organizational Behavior and Human Decision Processes*, 116, 272-285.

- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks/Cole.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. Austin (Eds.), *Psychology of intergroup relations* (pp. 7-24). Chicago: Nelson-Hall.
- Torelli, C. J., & Shavitt, S. (2010). Culture and concepts of power. *Journal of Personality and Social Psychology, 99*, 703–723. doi: 10.1037/a0019973
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). Rediscovering the social group. *A self-categorisation theory*. Oxford, UK: Basil Blackwell.
- 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. doi: 10.1111/j.1467-9280.2008.02241.x
- van Kleef, G. A., Oveis, C., Homan, A. C., van der Löwe, 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. doi: 10.1177/1948550614566857
- van Knippenberg, D. (2000). Work Motivation and Performance: A Social Identity Perspective. *Applied Psychology: An International Review, 49*, 357.
- Weick, M., & Guinote, A. (2008). When subjective experiences matter: Power increases reliance on the ease of retrieval. *Journal of Personality and Social Psychology, 94*, 956-970.
- Zhong, C.-B., Magee, J. C., Maddux, W. W., & Galinsky, A. D. (2006). Power, Culture, and Action: Considerations in the Expression and Enactment of Power in East Asian and Western Societies, 53–73. doi: 10.1016/S1534-0856(06)09003-7

Figure Captions

Figure 1. Perceived responsibility as a function of organizational identification (ID) and experienced power among leaders (Study 1, $N = 119$).

Figure 2. Perceived responsibility as a function of induced social identification and manipulated social power (Study 2, $N = 115$).

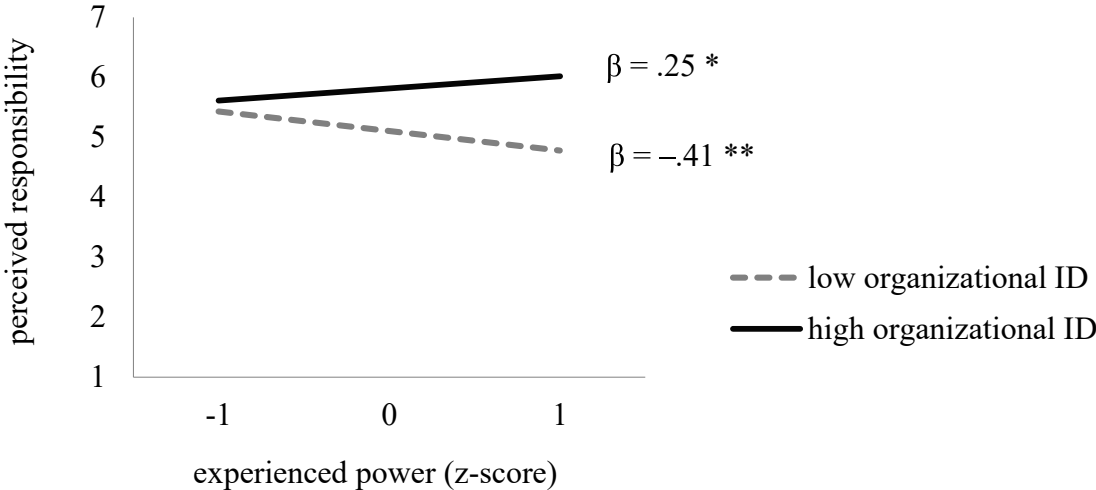


Figure 1. Perceived responsibility as a function of organizational identification (ID) and experienced power among leaders (Study 1, N = 119).

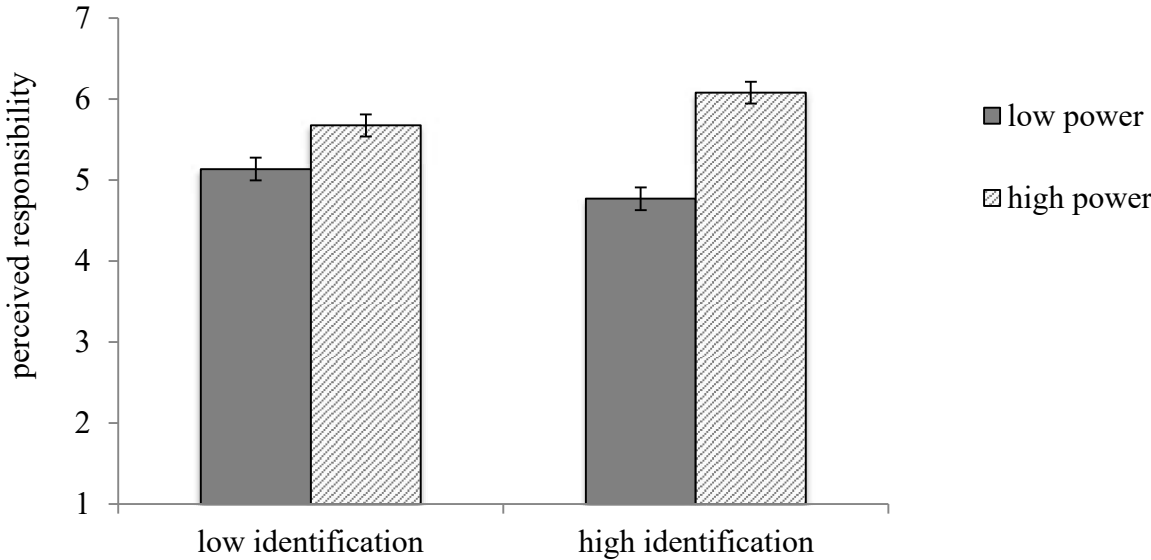


Figure 2. Perceived responsibility as a function of induced social identification and manipulated social power (Study 2, N = 115).

Supplemental Material

Measuring perceived responsibility: Scale construction

Study 1:

Table A. Factor loadings of all items to measure perception of responsibility on one factor in Study 1 (leader sample). **Items in bold** are included in the study as main DV perceived responsibility. *Items in italics* served as additional exploratory items to capture potentially related, but more external aspects of responsibility (i.e., formal accountability as justifying actions to others).

“In general, when making decisions, ...”	Factor loading
1. I sometimes think about how my decisions impact on others.	.642
2. I feel partly responsible for others' situation	.580
3. I am concerned about how much I can expect from others	.488
4. I don't need to care about other people's needs (to be reverse-coded)	-.518
5. I am not concerned about others' well-being (to be reverse-coded)	-.537
6. <i>I must do what others expect from me</i>	.580
7. <i>I must ensure that everything goes well</i>	.708
8. <i>I am accountable</i>	.576
9. <i>I can build upon others</i>	.362
10. <i>I am guilty when things go wrong</i>	.606

Please note that we assessed responsibility with 10 items when we started researching this construct – with the idea to directly measure felt responsibility (i.e., feeling the need to take care of things) and additionally (for exploratory purposes) an overlapping, yet potentially distinct perception of accountability (i.e., feeling required to formally justify one's behavior to others). The exact item wording to capture responsibility does slightly differ between Studies 1 and 2, because we were still in the process of building a reliable scale and because we assumed that slight adaptations to different participant groups (i.e., leaders vs. undergraduates) were likely needed.

Items in italics in Table A were, thus, not originally intended to be included in the scale for perceived responsibility (but intended to explore accountability); in our leader sample, however, we found that these 5 additional items also loaded highly on the same factor as our 5 responsibility items. Accordingly, we also ran our main analyses in Study 1 using a composite 10-item-perceived responsibility scale (as this composite scale had a good reliability; Cronbach's alpha: .75). Results for this **10-item scale** were highly similar as those reported for the 5-item-perceived responsibility scale as reported in the paper (see Table B below). We report results on the 5-item scale in the paper, because this scale was validated in other studies (e.g., Scholl et al., 2017) and comprised the items that were originally intended to measure perceived responsibility.

Table B. Multiple regression results, regressing perceived responsibility on experienced power, social identification, and their interaction (*main hypothesis*; Study 1):

5-item perceived responsibility scale (reported in the paper)	Model 1	Model 2
experienced power (z-standardized)	$\beta = -.02, p = .849$	$\beta = -.08, p = .365$
social identification (z-standardized)	$\beta = .38, p < .001$	$\beta = .45, p < .001$
experienced power x social identification		$\beta = .35, p < .001$
	$F(2,116) = 9.31, p < .001$ adj. $R^2 = .12$	$F(3,115) = 13.03, p < .001$ $\Delta R^2 = .12$
10-item composite responsibility scale (additional analysis)	Model 1	Model 2
experienced power (z-standardized)	$\beta = .01, p = .954$	$\beta = -.04, p = .648$
social identification (z-standardized)	$\beta = .41, p < .001$	$\beta = .46, p < .001$
experienced power x social identification		$\beta = .26, p = .003$
	$F(2,116) = 11.60, p < .001$ adj. $R^2 = .15$	$F(3,115) = 11.44, p < .001$ $\Delta R^2 = .06$

Study 2:

Table C. Factor loadings of all items included to measure perceived responsibility on one factor in Study 2. **Items depicted in bold** are included in the main text as DV perceived responsibility. *Items depicted in italics* were originally intended to capture the main DV, but excluded from analyses because of poor factor loadings in this specific study. Underlined items are excluded because of the direction of the factor loading. For details see below.

Responsibility item	Factor loading
1. I will sometimes think about how my decisions impact on others	.460
2. I can rely on others (to be reverse-coded)	-.532
3. I will feel partly responsible for others' situation	.748
4. I will need to take care that everything goes the right way	.770
5. I will be concerned about how much I can expect from others	.592
6. <u>I do not have to take care of others' needs</u> (to be reverse-coded)	.793
7. <i>I will not be concerned about others' well-being</i> (to be reverse-coded)	.181
8. <i>I must do what others expect from me</i>	.148
9. <i>I will be accountable</i>	-.317
10. <u>I will be guilty when things go wrong</u>	-.499

Following Study 1, we tested if all 10 items relating to responsibility constructs could be combined into a 10-item composite scale. However, using all **10 items** with recoding those items which we originally intended to reverse-code, produced a **non-usable scale (Cronbach's alpha: -.35)**. Similarly, combining all felt responsibility-items (items **1-7**) in one scale with recoding those items which we originally intended to reverse-code produced a low reliability (Cronbach's alpha = .13).

For this reason, for Study 2, we ran a **factor analysis**, testing which felt responsibility items loaded highly on one factor. It revealed the factor loadings as indicated in Table C. Items in bold are included in our 5-item perceived responsibility scale and the analyses reported in the paper; items underlined and those in italics were not included. The factor analysis revealed factor loadings on one factor as indicated in Table C (also included in the Supplement).

Importantly, we built this perceived responsibility scale we used based on **two criteria related to scale reliability (not related to hypothesis testing)**: (1) factor loadings $>.35$, and (2) items for which the loading was consistent with the content (i.e., not including items with loadings in the unexpected direction; this was the case for the positive loading for item 6, where higher values content-wise actually indicate less responsibility; and for the negative loading for item 10, where higher values content-wise actually indicate more responsibility).

As an **additional check**, we sought to test if our 5-item scale (i.e., the one we used in our main analyses) was differently and more strongly affected by the manipulations than the remaining (excluded) items—that is, we compared the effects of power x identification across both scale versions. To do so, we tested if the predicted power x social identification interaction from Study 2 is qualified by the item set used (i.e., for a potential 3-way interaction of power, identification, and item set). If this interaction is significant, this would suggest that the effect for the five key items we used is, indeed, stronger than the one for the remaining (excluded) 5 items—accordingly, this would provide additional evidence that both items sets were **measuring different concepts** in this study:

We analyzed this by means of a 2 (power) x 2 (identification) x 2 (item set: our 5 item-scale, as reported in the paper, items in bold from above vs. remaining 5-items scale, comprising the unused

items in italics/underlined) mixed analysis of variance with repeated measurement of the last factor. Results, indeed, yielded a significant three-way interaction, $F(1,111) = 6.41, p = .013, \eta_p^2 = .06$; this three-way interaction is composed of two two-way interactions, namely, the power x identification interaction for perceived responsibility (our used 5-item-scale) as reported in the paper, $F(1,111) = 7.76, p = .006, \eta_p^2 = .07$, and a non-significant power x identification interaction for the remaining 5 items scale, $F(1,111) = 0.29, p = .594, \eta_p^2 < .01$, indeed, empirically validating the idea that the excluded 5 items likely measured another concept (but not perceived responsibility) in this Study 2.

In sum, not all items (especially two recoded items) seemed to reliably capture participants' perceived responsibility towards others in this study, as these questions were originally intended to do. We, thus, based all analyses reported on a scale comprised of those items that allowed for the composition of an *internally consistent and content-wise meaningful* measure of this concept

Additionally measured, but not analyzed concepts

- helping motivation (Study 1)
- objectification (Study 1)
- preferences to distribute tasks (Study 2)