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# The impact of social power on the evaluation of offensive jokes

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**Abstract:** The current research examined whether social power affects what people find funny. In two experiments, participants' psychological state of social power was experimentally manipulated and their evaluations of offensive jokes were assessed. Results showed that participants in a psychological state of high power – as compared to low power – evaluated offensive jokes as less inappropriate, less offensive, and funnier. Mediation analyses showed that power increased the funniness of offensive jokes through decreasing the perceived inappropriateness of these jokes. Implications for research on power and humor are discussed.

**Keywords:** power, offensive jokes, benign violation theory, social psychology

## 1 Introduction

People's attempts to be funny come in many forms, for instance, by telling jokes that make fun of other people (e.g., members of a minority group). Although these jokes may amuse people, they can also be perceived as inappropriate and offensive, thereby attenuating the extent to which these jokes are perceived as funny. What makes such humor attempts more or less successful depends on the appraisals (i.e., subjective evaluations) of the receivers of these jokes. A recent theory on humor – Benign Violation Theory (BVT) – suggests that humor occurs when something seems wrong (i.e., a violation) yet also okay (i.e., benign; Peter and Warren 2010; Peter et al. 2015). According to BVT, humor is a psychological response characterized by the appraisal that something is funny, the positive emotion of amusement, and the tendency to laugh (Gervais and Wilson 2005; Martin 2007; Veatch 1998). The current research

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addresses a straightforward but interesting question: does a psychological state of social power influence the appraisal and perceived funniness of offensive jokes? Based on BVT and theories on social power, we propose that a state of high social power – as compared to low – decreases the appraised inappropriateness of offensive jokes and thereby increases the perceived funniness of these jokes.

## 1.1 Social power as a psychological state

Social power has been defined as asymmetric control over valued resources in social relations (Keltner et al. 2003; Magee and Galinsky 2008; Rucker et al. 2012). Ample research has shown that power is a psychological state. Feeling powerful or powerless can be activated by instructing participants to recall autobiographical events where they felt powerful or powerless and has the exact same effects as those obtained using structural and role-based manipulations of power (Anderson & Galinsky 2006; Galinsky et al. 2003). Such psychological states of power have been demonstrated to have important and far-reaching consequences for how people behave. In their review paper on power, Keltner et al. (2003) concluded that individuals feeling powerful: (a) experience and express more positive – approach related – emotions (e.g., amusement) and less negative – inhibition related – emotions (e.g., embarrassment), (b) attend more to social rewards, (c) construe others in terms how they satisfy their own goals and needs, (d) cognize their social environment in more automatic, simplistic fashion, and (e) behave in disinhibited and sometimes counter-normative ways. In contrast, individuals feeling powerless: (a) experience and express less positive emotions and more negative emotions, (b) attend more to punishment and threat, (c) make more careful, controlled judgments about others' intentions, attitudes, and actions, and (d) inhibit their own behavior and act contingently on others.

More recent research corroborated and strengthened the notion that social power has important and far-reaching consequences for many aspects of human behavior. For example, studies have shown that the powerful act more (e.g., are more likely to take another card in a game of blackjack or are more likely to remove an annoying electric fan), supporting the notion that powerful individuals experience less social constraints and show less inhibition as compared to the powerless (Galinsky et al. 2003). Furthermore, consistent with the notion that people in power have control over valued resources and are therefore less dependent on others, studies have shown that a high-power state hinders perspective-taking (Galinsky et al. 2006) and compassion (Van Kleef et al. 2008).

## 1.2 Social power and humor

The aforementioned theorizing and findings concerning social power provide a clear basis for predictions how social power will influence the evaluation of offensive jokes. As a psychological state of high power – compared to low – is associated with less social constraints, less inhibition, more psychological distance from others, and less distress and compassion in reaction to the suffering of others, we should observe that powerful individuals evaluate offensive jokes as less inappropriate and less offensive. We should also observe that more powerful individuals evaluate offensive jokes as funnier and are more willing to tell these jokes to someone else – because they tend to experience more approach related positive emotions (e.g., amusement) and behave in more disinhibited and counter-normative fashion. Moreover, we propose that these latter effects are mediated by differences in appraised inappropriateness. That is, we expect that more social power increases the perceived funniness of and willingness to tell offensive jokes through a decreased perceived inappropriateness of these jokes.

The relationship between social power and (offensive) humor has been addressed in prior research. These previous studies, for instance, examined how joking can serve to help structure local interaction hierarchies (Robinson and Smith-Lovin 2001), how high status group members differ from low status group members in their ratings of appropriateness of (offensive and non-offensive) jokes (Smeltzer and Leap 1988), or how the frequency of using subversive humor differs between informal and workplace meetings (Holmes and Marra 2002). The present research adds importantly to this prior work by being the first to combine social psychological research on social power with a recent theory on humor – Benign Violation Theory. Important, our research is the first to study the evaluation of offensive jokes using an experimental manipulation of social power, thereby allowing to draw causal conclusions regarding the impact of social power on the perceived appropriateness, offensiveness, and funniness of offensive jokes and people's willingness to tell these jokes to others.

## 1.3 Overview of the present research

The present research examines the impact of social power on the evaluation of offensive jokes. Moreover, we sought to provide a first test of a possible mechanism through which social power might affect humor. Experiment 1 examines the effects of social power on participants' evaluations of offensive jokes by placing them into a psychological state of high or low power and assessing their

evaluations of offensive jokes in terms of inappropriateness, offensiveness, funniness, and willingness to tell the joke to someone else. Experiment 2 is a conceptual replication and extension of our first experiment and tests the same hypotheses as Experiment 1. In this second experiment, we included additional measures and also explored whether social power increases moral hypocrisy in the context of offensive jokes. Both experiments demonstrate that participants who feel more powerful evaluate offensive jokes as less inappropriate, less offensive, and funnier. Moreover, both experiments provide mediation evidence that more powerful participants evaluate offensive jokes as funnier, because they appraise them as less inappropriate.

## 2 Experiment 1

In Experiment 1, we hypothesized that participants induced to feel powerful will evaluate offensive jokes as less inappropriate, less offensive, and funnier, and that they will be more willing to tell these jokes to someone else – relative to a powerless condition. Moreover, we hypothesized that powerful participants evaluate offensive jokes as funnier and are more willing to tell these jokes because they appraise them as less inappropriate.

### 2.1 Method

#### 2.1.1 Participants, design, and procedure

Eighty-nine undergraduates at a Dutch university (60 women;  $M_{\text{age}} = 20.42$  years,  $SD_{\text{age}} = 2.69$ ) were randomly assigned to a high-power ( $n = 39$ ) or low-power condition ( $n = 50$ ). Although participants were told that they would take part in two unrelated studies, in reality they participated in one experiment consisting of two (related) parts. In the first part of the experiment, a psychological state of high or social power was experimentally induced. Whereas in the second part, participants were asked to evaluate a series of jokes. Upon completing both parts, participants were probed for suspicion, debriefed, thanked, and rewarded for their participation.

#### 2.1.2 Power manipulation

Power was experimentally manipulated through an episodic priming task (cf. Galinsky et al. 2003; Mooijman et al. 2015). Participants in the high-power

condition were asked to recall and write about a situation in which they had power over others. More specifically, they were asked the following:

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

Participants in the low-power condition were asked to recall and write about a situation in which others had power over them. More specifically, they were asked the following:

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

### 2.1.3 Joke evaluations

Participant were asked to read 21 jokes and to evaluate each joke in terms of *inappropriateness* (Cronbach's  $\alpha = 0.93$ ), *offensiveness* ( $\alpha = 0.93$ ), and *funniness* ( $\alpha = 0.89$ ) – on scales from 1 to 7 (a higher score indicated that participants evaluated the joke as more inappropriate, more offensive, or funnier). They were also asked to indicate for each joke – on scales from 1 to 7 – their *willingness to tell* the joke to somebody else ( $\alpha = 0.91$ ; a higher score indicated a higher willingness to tell the joke).<sup>1</sup>

The jokes were selected on the basis of a pilot study, in which 37 undergraduates at a Dutch university evaluated 60 jokes in terms of inappropriateness, offensiveness, and funniness. Of the selected jokes, seven were related to a disability, seven were related to ethnicity, and seven were related to gender. These jokes had inappropriateness ratings that were higher than the overall mean of all jokes of one type. The mean funniness of selected jokes did not differ between types of jokes ( $M_{\text{overall}} = 3.14$ ,  $SD = 1.02$ ),  $F(1, 36) = 2.81$ ,  $p = 0.13$ .

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<sup>1</sup> Inappropriateness was significantly correlated to offensiveness (Pearson's  $r = 0.88$ ;  $p < 0.001$ ), funniness ( $r = -0.30$ ;  $p = 0.004$ ), and willingness to tell ( $r = -0.40$ ;  $p < 0.001$ ). Offensiveness was significantly correlated to funniness ( $r = -0.25$ ;  $p = 0.017$ ) and willingness to tell ( $r = -0.26$ ;  $p = 0.013$ ). Funniness was significantly related to willingness to tell ( $r = 0.79$ ;  $p < 0.001$ ). The patterns of these correlations were similar in both power conditions.

## 2.2 Results and discussion

To test our hypotheses, we conducted four mixed Analyses of Variance (ANOVAs) with power (high, low) as between-participants variable, type of joke (disability-jokes, ethnicity-jokes, gender-jokes) as repeated measure, and inappropriateness, offensiveness, funniness, and willingness to tell as dependent variable, respectively.

### 2.2.1 Inappropriateness

Results yielded a statistical significant main effect of power on inappropriateness,  $F(1, 87) = 14.41, p < 0.001, \eta^2 = 0.14$ . High-power participants evaluated the jokes as less inappropriate ( $M = 3.59, SD = 0.87$ ) than low-power participants ( $M = 4.34, SD = 0.96$ ). Results also showed a significant main effect of type of joke,  $F(2, 174) = 438.95, p < 0.001, \eta^2 = 0.84$ . Gender-jokes ( $M = 2.11, SD = 1.14$ ) were evaluated as less inappropriate than ethnicity-jokes ( $M = 5.16, SD = 1.14; t[89] = 23.76, p < 0.001$ ) and disability-jokes ( $M = 4.77, SD = 1.19; t[89] = 22.19, p < 0.001$ ). The latter two means also differed significantly from each other,  $t(89) = 4.99, p < 0.001$ . No significant interaction effect was found between power and type of joke,  $F(2, 174) = 1.84, p = 0.16$ .

### 2.2.2 Offensiveness

Results yielded a significant main effect of power on offensiveness,  $F(1, 87) = 12.25, p = 0.001, \eta^2 = 0.12$ . High-power participants evaluated the jokes as less offensive ( $M = 3.35, SD = 0.96$ ) than low-power participants ( $M = 4.08, SD = 1.01$ ). Results also showed a significant main effect of type of joke,  $F(2, 174) = 430.54, p < 0.001, \eta^2 = 0.83$ . Gender-jokes ( $M = 1.91, SD = 1.04$ ) were evaluated as less offensive than ethnicity-jokes ( $M = 4.91, SD = 1.27; t[89] = 24.50, p < 0.001$ ) and disability-jokes ( $M = 4.46, SD = 1.30; t[89] = 22.78, p < 0.001$ ). The latter two means also differed significantly from each other,  $t(89) = 4.93, p < 0.001$ . No significant interaction effect was found between power and type of joke,  $F(2, 174) = 2.29, p = 0.10$ .

### 2.2.3 Funniness

Results yielded a significant main effect of power on funniness,  $F(1, 87) = 4.54, p = 0.038, \eta^2 = 0.049$ . High-power participants evaluated the jokes as funnier ( $M = 3.38, SD = 0.93$ ) than low-power participants ( $M = 2.92, SD = 1.08$ ). Results

also showed a significant main effect of type of joke,  $F(2, 174) = 54.45$ ,  $p < 0.001$ ,  $\eta^2 = 0.39$ . Gender-jokes ( $M = 3.93$ ,  $SD = 1.14$ ) were evaluated as funnier than ethnicity-jokes ( $M = 2.63$ ,  $SD = 1.36$ ;  $t[89] = 8.45$ ,  $p < 0.001$ ) and disability-jokes ( $M = 2.81$ ,  $SD = 1.27$ ;  $t[89] = 7.41$ ,  $p < 0.001$ ). The latter two means also differed significantly from each other,  $t(89) = 2.36$ ,  $p = 0.021$ . No significant interaction effect was found between power and type of joke,  $F < 1$ .

#### 2.2.4 Willingness to tell

Results yielded a trend of power on willingness to tell,  $F(1, 87) = 2.57$ ,  $p = 0.11$ ,  $\eta^2 = 0.029$ . High-power participants were slightly, but not statistically significant, more willing to tell the jokes to someone else ( $M = 2.60$ ,  $SD = 1.05$ ) than low-power participants ( $M = 2.25$ ,  $SD = 0.98$ ). Results did show a significant main effect of type of joke,  $F(2, 174) = 29.06$ ,  $p < 0.001$ ,  $\eta^2 = 0.25$ . Participants were more willing to tell gender-jokes ( $M = 2.95$ ,  $SD = 1.23$ ) than disability-jokes ( $M = 2.16$ ,  $SD = 1.15$ ;  $t[89] = 5.76$ ,  $p < 0.001$ ) or ethnicity-jokes ( $M = 2.11$ ,  $SD = 1.27$ ;  $t[89] = 5.93$ ,  $p < 0.001$ ). No significant interaction effect was found between power and type of joke,  $F(2, 174) = 1.11$ ,  $p = 0.33$ .

#### 2.2.5 Mediation analyses

We hypothesized that social power increases the funniness of offensive jokes through decreasing the perceived inappropriateness of these jokes. To test for this mediation, we followed the recommendations of Preacher and Hayes (2008) who suggest using a bootstrapping procedure to compute confidence intervals around the indirect effects (i.e., the path through the mediator). If zero falls outside an interval, mediation can be said to be present. We used the SPSS macros that Preacher and Hayes provide for this procedure. In a first mediation analysis, condition (high-power vs. low-power) was the independent variable, funniness was the dependent variable, and inappropriateness was the mediator. Whereas in an additional second mediation analysis, we included offensiveness as the mediator. We used a bootstrapped mediation analysis with 5,000 bootstrap resamples and bias-corrected and accelerated intervals. We used single mediator analyses with either inappropriateness or offensiveness as mediator. Because of multicollinearity (i.e., the possible mediators were correlated, see Footnote 1), we could not include inappropriateness and offensiveness in one model, as multiple mediation analyses are conducted under the assumption that the possible mediators are uncorrelated.

Results showed that the effect of power on funniness was mediated by a decrease in inappropriateness (95 % CI = [-0.51, -0.01]), but not by a decrease in offensiveness, 95 % CI = [-0.41, 0.02]. More specific, the significant effect of power on funniness ( $\beta = -0.22$ ,  $t = -2.11$ ,  $p = 0.038$ ) was reduced to non-significance ( $\beta = -0.12$ ,  $t = -1.13$ ,  $p = 0.26$ ) when inappropriateness was added to the model (which by itself still predicted funniness,  $\beta = -0.25$ ,  $t = -2.23$ ,  $p = 0.023$ ). These results indicate that power increased the funniness of offensive jokes through decreasing perceived inappropriateness.

Results of Experiment 1 showed a clear effect of power on the evaluation of offensive jokes. High-power participants – as compared to low-power participants – evaluated offensive jokes as less inappropriate, less offensive, and funnier. Moreover, results indicate that these effects were not contingent on the type of joke. Although results did not yield a significant effect of power on the willingness to tell an offensive joke, they did reveal a (slight) trend in the expected direction.

### 3 Experiment 2

The second experiment was a conceptual replication and extension of Experiment 1. In this experiment, we used a different and smaller set of offensive jokes, included two additional measures, added several items to measure our main dependent variables, and added another experimental factor to the design.

More specific, participants' feelings of power and mood were assessed directly after the episodic priming task. The first assessment enables us to check whether our power manipulation had an effect on participants' feelings of power and indicates whether or not our manipulation of social power was successful. The second assessment enables us to check whether our power manipulation affected participants' general mood. This is important to check, as a diffuse (positive or negative) mood may predispose participants to experience similarly toned emotions as a suitable emotion-evoking stimulus is presented to them (e.g., an offensive joke). If our power manipulation shows the intended effect on participants' feelings of social power, but not an unintended effect on their general mood, the observed differences between experimental conditions in the evaluation of offensive jokes can be attributed to differences in feelings of social power, but not to differences in general mood and thereby to a higher predisposition to experience similarly toned emotions.

We also included a more specific assessment of offensiveness. That is, we assessed the extent to which participants considered the jokes about disabilities,



ethnicity, and gender offensive to members of these specific groups. Furthermore, we assessed participants' joke evaluations in terms of inappropriateness and funniness with two items instead of one.

In addition to conceptually replicating our first study, we explored whether power increases moral hypocrisy in the context of offensive jokes. Earlier research has shown that – compared to individuals lacking power – powerful individuals judge their own moral transgressions more acceptable, but the same transgressions committed by others less acceptable (Lammers et al. 2010). Therefore, we asked some participants to evaluate offensive jokes imagining telling these jokes themselves, whereas we asked others to evaluate the jokes if these were told by another person. A moral hypocrisy effect would be obtained if high-power participants evaluate offensive jokes as less inappropriate, less offensive, and funnier when these jokes were told by themselves as compared to when they were told by another person.

## 3.1 Method

### 3.1.1 Participants, design, and procedure

Participants were 164 undergraduates at a Dutch university (83 women;  $M_{\text{age}} = 20.42$  years,  $SD_{\text{age}} = 2.69$ ), who were randomly assigned to one of four conditions of a 2 (power induction: high, low) X 2 (perspective: self, other) between-participants design (with 40 to 42 participants in each condition). The procedure was similar to Experiment 1.

### 3.1.2 Power manipulation, manipulation check, and mood assessment

Power was manipulated using the same episodic priming task as in Experiment 1. Following the power induction, participants were presented with 23 words and asked to indicate – on scales from 1 (*not at all*) to 4 (*very much*) – how applicable each word was to their current thoughts and feelings. Answers to the following seven items were averaged and served as a power manipulation check: *influential*, *powerful*, *dominant*, *important*, *submissive*, *unimportant*, and *dependent* (answers to the last three items were reverse-scored;  $\alpha = 0.74$ ). Answers to the following 16 items were averaged and served as an assessment of participants' mood: *lively*, *happy*, *caring*, *satisfied*, *energetic*, *calm*, *loving*, *active*, *sad*, *tired*, *unenergetic*, *cranky*, *nervous*, *jumpy*, *down*, and *dissatisfied* (answers to the last eight items were reverse-scored;  $\alpha = 0.87$ ). The 23 items were presented in a mixed order to participants.

### 3.1.3 Joke evaluations

Participants were asked to read 12 jokes (three disability-jokes, four ethnicity-jokes, five gender-jokes) and to indicate – on seven-point scales (1 = *not at all*; 7 = *very much*) – the extent to which they evaluated the joke as *funny* and *enjoyable* (averaged to form an assessment of *funniness*;  $\alpha = 0.91$ ) and as *inappropriate* and *indecent* (averaged to form an assessment of *inappropriateness*;  $\alpha = 0.91$ ). Next, they were asked to indicate – on three seven-point scales (1 = *not at all*; 7 = *very much*) – the extent they evaluated the joke as offensive for disabled people ( $\alpha = 0.73$ ), members of certain ethnic groups ( $\alpha = 0.80$ ), and men or women ( $\alpha = 0.84$ ). Last, participants were asked to indicate – on a seven-point scale (1 = *I would never tell this joke to somebody*; 7 = *I would certainly tell this joke to somebody*) – their *willingness to tell* the joke (this question was only asked in the self condition;  $\alpha = 0.73$ ).<sup>2</sup>

### 3.1.4 Self- versus other-perspective manipulation

In the self-perspective condition participants were asked to answer all questions while imagining that they themselves would tell the joke, whereas participants in the other-perspective condition were asked to answer all questions while imagining that somebody else, who was unknown to them, would tell the joke.

## 3.2 Results and discussion<sup>3</sup>

### 3.2.1 Manipulation check and mood assessment

An independent samples t-test yielded a significant effect of power on the manipulation check items,  $t(162) = 2.26$ ,  $p = 0.025$ . High-power participants felt

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<sup>2</sup> Inappropriateness was significantly correlated to offensiveness ( $r = 0.68$ ;  $p < 0.001$ ), funniness ( $r = -0.49$ ;  $p < 0.001$ ), and willingness to tell ( $r = -0.49$ ;  $p < 0.001$ ). Offensiveness was significantly correlated to funniness ( $r = -0.26$ ;  $p = 0.001$ ), but not to willingness to tell ( $r = -0.19$ ;  $p = 0.09$ ). Funniness was significantly correlated to willingness to tell ( $r = 0.89$ ). The patterns of these correlations were similar in both power conditions.

<sup>3</sup> We did not include gender as a factor in our research. When we checked Experiment 2 for possible gender differences, we found no significant interaction effect between social power and gender on any of the assessed dependent variables. This indicates that indeed our social power manipulation had the same effect for female and male participants. However, women, as compared to men, evaluated disability-jokes as more inappropriate, more offensive, and less

more powerful ( $M=2.79$ ,  $SD=0.45$ ) than low-power participants ( $M=2.63$ ,  $SD=0.49$ ). Results of an additional t-test showed that – before they read and evaluated the jokes – high-power participants ( $M=3.14$ ,  $SD=0.46$ ) did not differ in their mood from low-power participants ( $M=3.04$ ,  $SD=0.44$ ),  $t(162)=1.54$ ,  $p=0.13$ . This indicates that our manipulation of power was successful – it had the intended effect on participants' feelings of social power, but not an unintended effect on their general mood.

### 3.2.2 Self- versus other-perspective

Initial mixed ANOVAs with power (high, low) and perspective (self, other) as between-participants variables, type of joke (disability-jokes, ethnicity-jokes, gender-jokes) as repeated measure, and inappropriateness, offensiveness, and funniness as dependent variables yielded no significant main or interaction effects of perspective ( $F_s < 2.21$ ,  $p_s > 0.13$ ). Therefore we, subsequently, conducted four separate mixed ANOVAs with power as between-participants variable, type of joke as repeated measure, and inappropriateness, offensiveness, funniness, and willingness to tell the joke as dependent variable, respectively.

### 3.2.3 Inappropriateness

Results yielded a significant main effect of power on inappropriateness,  $F(1, 162) = 6.88$ ,  $p = 0.010$ ,  $\eta^2 = 0.041$ . High-power participants evaluated the joke as less inappropriate ( $M = 3.26$ ,  $SD = 1.20$ ) than low-power participants ( $M = 3.72$ ,  $SD = 1.07$ ). Furthermore, results yielded a significant main effect of type of joke,  $F(2, 324) = 99.62$ ,  $p < 0.001$ ,  $\eta^2 = 0.38$ . Disability-jokes ( $M = 4.19$ ,  $SD = 1.47$ ) were evaluated as more inappropriate than ethnicity-jokes ( $M = 3.18$ ,  $SD = 1.24$ ;  $t[164] = 11.05$ ,  $p < 0.001$ ) and gender-jokes ( $M = 3.11$ ,  $SD = 1.23$   $t[164] = 10.62$ ,  $p < 0.001$ ). The latter two means did not differ significantly from each other,  $t(164) = 1.17$ ,  $p = 0.24$ .

Also a significant interaction effect was obtained between power and type of joke,  $F(2, 324) = 4.48$ ,  $p = 0.012$ ,  $\eta^2 = 0.027$ . Inspection of the relevant means

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funny and were less willing to tell these jokes to someone else. Furthermore, women evaluated ethnicity-jokes as more inappropriate and less funny and they rated gender-jokes as more offensive. Note that we did not check for possible gender differences in Experiment 1, because in this experiment the absolute number of male participants was too low to conduct any meaningful analyses with gender as an additional factor in our design.

showed that the difference in inappropriateness between high-power and low-power participants was larger for disability-jokes ( $M = 3.81$  [ $SD = 1.51$ ] vs.  $M = 4.56$  [ $SD = 1.33$ ];  $t[162] = 3.39$ ,  $p = 0.001$ ) than for gender-jokes ( $M = 2.98$  [ $SD = 1.29$ ] vs.  $M = 3.24$  [ $SD = 1.18$ ];  $t[162] = 1.36$ ,  $p = 0.18$ ) and ethnicity-jokes ( $M = 2.99$  [ $SD = 1.29$ ] vs.  $M = 3.37$  [ $SD = 1.18$ ];  $t[162] = 1.99$ ,  $p = 0.05$ ). The finding that the effect of power on the evaluation of offensive jokes in terms of inappropriateness was more pronounced for jokes that were perceived as more offensive is, in our view, consistent with our theoretical framework.

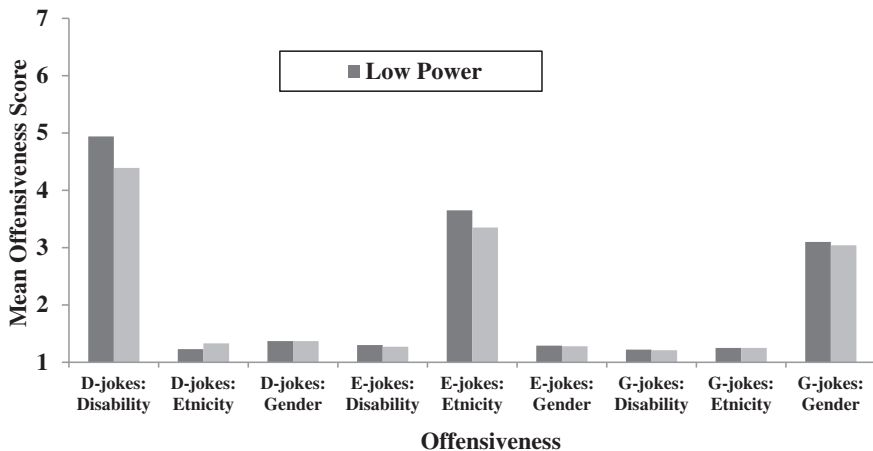
### 3.2.4 Offensiveness

In the mixed ANOVA concerning offensiveness, the type of offensiveness question was included as an additional repeated measure. Results of this analysis yielded no main effect of power on offensiveness,  $F < 1$ . Results did show a significant main effect of type of joke ( $F[2, 324] = 109.16$ ,  $p < 0.001$ ,  $\eta^2 = 0.40$ ), indicating that participants' means for all three offensiveness questions were higher for disability-jokes ( $M = 2.44$ ,  $SD = 0.79$ ) than for ethnicity-jokes ( $M = 2.02$ ,  $SD = 0.73$ ;  $t[164] = 8.50$ ,  $p < 0.001$ ) and gender-jokes ( $M = 1.84$ ,  $SD = 0.67$ ;  $t[164] = 13.85$ ,  $p < 0.001$ ). Whereas these means were higher for ethnicity-jokes than for gender-jokes ( $t[164] = 5.99$ ,  $p < 0.001$ ). Results also yielded a significant main effect of type of offensiveness question ( $F[2, 324] = 86.09$ ,  $p < 0.001$ ,  $\eta^2 = 0.35$ ), indicating that participants' means for the questions related to offensiveness towards disabled people were higher ( $M = 2.39$ ,  $SD = 0.71$ ) than for those related to offensiveness towards members of ethnic groups ( $M = 2.01$ ,  $SD = 0.71$ ;  $t[164] = 8.50$ ,  $p < 0.001$ ) and towards men or women ( $M = 1.91$ ,  $SD = 0.76$ ;  $t[164] = 11.86$ ,  $p < 0.001$ ). Whereas these means were higher for the questions related to offensiveness towards members of ethnic groups than towards men or women,  $t(164) = 3.35$ ,  $p = 0.001$ .

Furthermore, results yielded a significant interaction effect between type of joke and type of offensiveness question ( $F[4, 648] = 672.41$ ,  $p < 0.001$ ,  $\eta^2 = 0.81$ ), indicating that participants evaluated: (a) disability-jokes more offensive for disabled people ( $M = 4.66$ ,  $SD = 1.57$ ) than for men or women ( $M = 1.37$ ,  $SD = 0.79$ ;  $t[164] = 27.23$ ,  $p < 0.001$ ) and members of ethnic groups ( $M = 1.28$ ,  $SD = 0.68$ ;  $t[164] = 27.31$ ,  $p < 0.001$ ). The latter two means also differed significantly from each other ( $t[164] = 2.90$ ,  $p = 0.004$ ), (b) gender-jokes more offensive for men or women ( $M = 3.07$ ,  $SD = 1.28$ ) than for members of ethnic groups ( $M = 1.24$ ,  $SD = 0.62$ ;  $t[164] = 20.22$ ,  $p < 0.001$ ) and disabled people ( $M = 1.22$ ,  $SD = 0.55$ ;  $t[164] = 20.14$ ,  $p < 0.001$ ), and (c) ethnicity-jokes more offensive for members of ethnic groups ( $M = 3.50$ ,  $SD = 1.41$ ) than for men and women ( $M = 1.29$ ,  $SD = 0.64$ ;  $t[164] = 21.65$ ,  $p < 0.001$ ) and disabled people ( $M = 1.29$ ,

$SD = 0.66$ ;  $t[164] = 21.34$ ,  $p < 0.001$ ). These results indicate that, as intended, participants evaluated disability-jokes as most offensive for disabled people, gender-jokes as most offensive for men or women, and ethnicity-jokes most offensive for members of ethnic groups.

Although results yielded no significant main effect of power, they did yield a significant three-way interaction between power, type of joke, and type of offensiveness question ( $F[4, 648] = 3.44$ ,  $p = 0.009$ ,  $\eta^2 = 0.021$ ), indicating that the difference between high-power and low-power participants was larger for their evaluation of offensiveness towards disabled people for disability-jokes ( $M = 4.94$  vs.  $M = 4.39$ ;  $t[162] = 2.28$ ,  $p = 0.024$ ) than for their evaluation of offensiveness towards men or women for gender-jokes ( $M = 3.04$  vs.  $M = 3.10$ ;  $t[162] = 0.30$ ,  $p = 0.77$ ) and their evaluation of offensiveness towards members of ethnic groups for ethnicity-jokes ( $M = 3.35$  vs.  $M = 3.65$ ;  $t[162] = 1.38$ ,  $p = 0.17$ ). The other means for their evaluation of offensiveness varied between 1.22 and 1.37 (see Figure 1).



**Figure 1:** Mean offensiveness scores for three types of jokes and three types of offensiveness questions.

The obtained significant three-way interaction between power, type of joke, and type of offensiveness question indicates that high-power evaluated disability-jokes less offensive for disabled people than low-power participants. The absence of a significant main effect of power might be due to the fact that ethnicity-jokes and gender-jokes were overall evaluated as less offensive than disability-jokes and suggests that the effect of power on the evaluation of jokes is more pronounced when jokes are more offensive. This is consistent with the obtained results for the evaluation of jokes in terms of inappropriateness.

### 3.2.5 Funniness

Results yielded a significant main effect of power on funniness,  $F(1, 162) = 6.72$ ,  $p = 0.010$ ,  $\eta^2 = 0.040$ . High-power participants evaluated the jokes as funnier ( $M = 3.76$ ,  $SD = 1.13$ ) than low-power participants ( $M = 3.35$ ,  $SD = 0.99$ ). Furthermore, results yielded a main effect of type of joke,  $F(2, 324) = 41.52$ ,  $p < 0.001$ ,  $\eta^2 = 0.20$ . Disability-jokes ( $M = 2.99$ ,  $SD = 1.45$ ) were evaluated as less funnier than ethnicity-jokes ( $M = 3.81$ ,  $SD = 1.23$ ;  $t[164] = 7.88$ ,  $p < 0.001$ ) and gender-jokes ( $M = 3.82$ ,  $SD = 1.36$ ;  $t[164] = 7.16$ ,  $p < 0.001$ ). No significant interaction effect was found between power and type of joke,  $F < 1$ .

### 3.2.6 Willingness to tell

Results yielded a trend of power on willingness to tell,  $F(1, 79) = 2.98$ ,  $p = 0.088$ ,  $\eta^2 = 0.036$ . High-power participants were slightly more willing to tell the joke ( $M = 3.30$ ,  $SD = 0.92$ ) than low-power participants ( $M = 2.95$ ,  $SD = 0.89$ ). Although results only yielded a trend of power, the obtained means were in the expected direction. Furthermore, results yielded a main effect of type of joke,  $F(2, 158) = 14.56$ ,  $p < 0.001$ ,  $\eta^2 = 0.16$ . Participants were less willing to tell disability-jokes ( $M = 2.67$ ,  $SD = 1.28$ ) than gender-jokes ( $M = 3.37$ ,  $SD = 1.11$ ;  $t[81] = 4.38$ ,  $p < 0.001$ ) and ethnicity-jokes ( $M = 3.32$ ,  $SD = 1.14$ ;  $t[81] = 4.30$ ,  $p < 0.001$ ). No significant interaction effect was found between power and type of joke,  $F < 1$ .

### 3.2.7 Mediation analyses

Because of multicollinearity (i.e., the possible mediators were correlated, see Footnote 2), we used single mediator analyses with either inappropriateness or offensiveness as mediator. Results of a bootstrapped mediation analysis (cf. Experiment 1) showed that the effect of power on funniness was mediated by a decrease in inappropriateness (95% CI = [-0.47, -0.07]), but not by a decrease in offensiveness, 95% CI = [-0.11, 0.02]. More specifically, the significant effect of power on funniness ( $\beta = -0.19$ ,  $t = -2.45$ ,  $p = 0.016$ ) was reduced to non-significance ( $\beta = 0.09$ ,  $t = 1.33$ ,  $p = 0.19$ ) when inappropriateness was added to the model (which by itself still predicted funniness,  $\beta = -0.48$ ,  $t = -6.83$ ,  $p < 0.001$ ). These results indicate that power increased the funniness of offensive jokes through decreasing its perceived inappropriateness.

## 4 General discussion

In two experiments, we provide evidence that social power affects the evaluation of offensive jokes. Consistent with the notion that high-power leads one to experience less social constraints, show less inhibition, experience more distance from others, and respond with less distress and compassion to the suffering of others, we found that participants in a psychological state of high power – relative to low power – evaluated offensive jokes as less inappropriate and less offensive. Furthermore, consistent with the notion that feeling more powerful leads to the experience of more approach related positive emotions and less inhibition related negative emotions, we found that high-power – relative to low-power – individuals evaluated offensive jokes as funnier. Moreover, mediation analyses showed that social power increased the funniness of offensive jokes through decreasing perceived inappropriateness. Last, consistent with the notion that a state of high power leads to more disinhibited behavior, we found a slight indication that high-power – relative to low-power – individuals were more willing to tell offensive jokes to someone else. Although this last finding did not reach statistical significance, in both experiments we did observe trends in the expected direction.

The present research indicates that occupying a powerful or powerless position matters for one's appreciation of offensive jokes. Those who occupy the upper echelons of society may be less likely to be offended by offensive humor compared to those who reside on the bottom rung of society. As such, our results add an important contextual factor to the growing psychological literature on humor (Peter and Warren 2010; McGraw et al. 2012; McGraw et al. 2014). Humor is not only a property of the joke (e.g., severity of a joke, distance from a joke) but is also dependent on the *psychological state* of those to whom the joke is communicated. Benign Violation Theory (Peter and Warner 2014; McGraw et al. 2014) proposes that a potential joke is deemed funny when: (a) it violates a norm, (b) the violation is benign, and (c) both perceptions occur simultaneously. For a violation to be perceived as benign, it has to be appraised as acceptable. Although the jokes used in the current research were clear norm violations, results of our mediation analyses showed that participants who felt more powerful appraised offensive jokes as less inappropriate (i.e., more acceptable) and therefore as funnier. This finding might be due to power decreasing empathic responses (Van Kleef et al. 2008) and increasing psychological distance towards others (Magee and Smith 2013). Indeed, previous research has demonstrated how people find more humor in tragedies when they are temporally, socially, or hypothetically distant (McGraw et al. 2012).

## 4.1 Limitations and directions for future research

One limitation of the present research is that we did not include a base-line power condition in our experiments; therefore, it remains unclear whether the obtained effects of power are (primarily) due to a psychological state of high power or low power. Although we have no empirical findings to answer this question, we expect that our effects are affected by both psychological states of power. Some indication for the validity of our expectation can be derived from comparing the mean funniness ratings in Experiment 1 ( $M = 3.38$  and  $M = 2.92$  in the high power and low power condition, respectively) with the mean funniness rating in our pilot study ( $M = 3.14$ ). The observation that the mean in our pilot study (in which participants were in a relative power-neutral state) was in between the means of the high-power and low-power participants of Experiment 1 suggests that a psychological state of powerfulness makes offensive humor funnier, whereas a state of powerlessness makes it less funny. This is of course a less than ideal comparison and future studies, in which a base-line power condition is included, could provide more definite answers to this question.

Another limitation of the present research is that our studies did not include non-offensive jokes; therefore, it remains unclear whether social power leads to greater perceived funniness of jokes in general independent of how offensive the jokes are. Although this remains an empirical question that future research could address, our data provide some preliminary insights in this issue. In Experiment 2 we found that the effect of power on the evaluation of offensive jokes in terms of inappropriateness was more pronounced for jokes that were perceived as more offensive. This might suggest that – even if social power leads to greater perceived funniness of jokes in general – the effect of social power might be larger when jokes are more offensive. It should be noted, however, that we did not find a significant interaction between social power and type of joke in Experiment, which one would have expected if our suggestion holds. Future studies could examine this interesting question in more detail to arrive at more conclusive answers.

In our present research is that we relied on only one experimental manipulation of power. Although previous research has demonstrated that an episodic priming task yield the exact same effects as those obtained using other manipulations of power (Anderson & Galinsky 2006; Galinsky et al. 2003), future studies on the relation between power and humor could include different manipulations of power (e.g., structural or role-based manipulations of power).

In our second experiment, we did not obtain a moral hypocrisy effect. There could be several reasons for this lack of effect. For instance, in the research of



Lammers et al. (2010) – on which we based our hypothesis concerning power and moral hypocrisy – cheating, breaking the speed limit, tax fraud, and stealing were used as moral transgressions. Perhaps telling offensive jokes was not considered as a clear moral transgression and therefore no moral hypocrisy effect was found. Furthermore, in our research we assessed the inappropriateness of the jokes itself and not the moral evaluation of telling an offensive joke. In other words, we might not have assessed the most relevant variable to find a moral hypocrisy effect. Future studies could include an assessment of how acceptable it is for oneself or for another person to tell a specific offensive joke. This would be, in retrospect, a better test for the existence of a moral hypocrisy effect in the context of offensive jokes.

The present research, in our view, provides an excellent starting point for a more extended examination of the effects of power on humor and we hope that our experiments will spark more studies on this intriguing topic. For example, future studies could provide more insights in the impact of the characteristics of the individual who tells an offensive joke or the characteristics of the individual an offensive joke is being told to (e.g., group membership, status). It is conceivable that the former characteristics influence the perceived inappropriateness of an offensive joke, whereas the latter influences one's willingness to tell an offensive joke. Furthermore, studies could investigate the extent to which power holders believe others to share their view on offensive humor. In other words, do power holders realize that others might consider inappropriate what they find humorous? To test this, one could manipulate the extent to which participants viewed the jokes through their own perspective or the perspective of someone else. Earlier research (Galinsky et al. 2006; Overbeck and Drouman 2013) has indicated that power holders' view of others is heavily anchored on their own attitudes, therefore one could predict that a self versus other perspective matters less for powerful than for powerless individuals.

Although we used Benign Violation Theory as a theoretical framework for our present research, we do not suggest that our findings are at odds with other theories on humor, for example, incongruity theories. Benign Violation Theory is a recent theory on humor and more specific research is needed to examine whether and when this theory contributes above and beyond other theories on humor.

## 5 Conclusions

In our introduction we raised the question whether the psychological state of social power influences the appraisal and perceived funniness of offensive jokes.

By demonstrating that individuals in a state of high power evaluate offensive jokes as funnier research through decreasing the perceived inappropriateness of these jokes, we have provided not only a positive answer to this question but also important insight in the underlying mechanisms through which social power affects humor.

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## Appendix

### 6 examples of the 21 Jokes used in Experiment 1

**Disability jokes.** “What do you call a leper in a box? A do-it-yourself kit!”; “How do know when someone with Down syndrome is standing on a level surface? When he slavers equally from both corners of his mouth!”

**Ethnicity jokes.** “What is the difference between a Jew and a pizza? A pizza doesn’t scream in the oven!”; “What do you call a negro with bone cancer? An Aero candy bar!”

**Gender jokes.** “Why do men love women with small hands? Because then their dicks look bigger!”; “Two blond girls are having a conversation. One girl is telling the other that this morning she performed a pregnancy test. Then the other girl asks: ‘Did it contain difficult questions?’”

### 4 examples of the 12 Jokes used in Experiment 2

**Disability joke.** “Doctor says to a sick man: ‘Your illness is terminal. It doesn’t take long before you die. I can only advise you a mud bath.’ Sick man: ‘A mud bath? But would that not help at all?’ Doctor: ‘No, but then you can already get used to the earth.’”

**Ethnicity joke.** “Who invented the triathlon? A Turk: He went by foot to the swimming pool and came back with a bike!”

**Gender jokes.** “Why can’t a woman save money? Have you ever seen a piggy bank with a slit on the underside?”; “Why did Moses wander for 40 years in the desert? Because men never ask for directions!”

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