Reducing the Bias: How Perspective Taking Affects First- and Third-Person Perceptions of Media Influence

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Third- and first-person perceptions (TPPs/FPPs) are considered to be biased judgments of media influence on self and others. Research suggests that perspective taking, i.e., thinking from another person's position, decreases perceptual gaps between self and others via assimilation. In a two-factorial experiment (n = *431), we test whether this effect of perspective taking (Factor 1) holds true for the presumed influence of desirable and undesirable messages (Factor 2). Results indicate that perspective taking significantly reduces TPPs in the case of an undesirable message but not FPPs that are provoked by the desirable message. The observable effect traces back to a change in presumed message influence on the self. Presumed influence on others was independent of both factors, desirability of message influence and perspective taking. These findings are discussed in the light of cognitive and motivational explanations for FPPs/TPPs.*

Keywords: Bias; First-Person Perception; Perspective Taking; Stereotype; Third-Person Perception

People overestimate negative media influence on others, while they underestimate negative influence on themselves. The occurrence of this so-called *third-person perception* (TPP; see, e.g., McLeod, Detenber, & Eveland, 2001) largely depends on message evaluation. Research has shown that the self-other perceptual gap can be reversed if media messages are considered to have desirable effects, e.g., public service announcements or

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health education ads. In such cases, individuals assume themselves to be more strongly influenced than others (*first-person perception*; FPP; Golan & Day, 2008). Research also supports a large number of attitudinal and behavioral consequences of TPPs and FPPs: Biased judgments of media influence on self and others have been shown to affect, for instance, media censorship attitudes, voting intentions, or health-related behaviors (for an overview, see Xu & Gonzenbach, 2008). It is because of these consequences that researchers strive to understand the origins of these biased judgments in order to prevent them. However, studies yielded mixed results without offering a coherent theoretical framework (Shen, Palmer, Mercer Kollar, & Comer, 2015).

The present study contributes to this research. We consider TPPs and FPPs as *social judgments* that could be less biased if individuals engaged in *perspective taking*, i.e., thinking from the perspective of others. For other contexts, existing research has shown that perspective taking reduces bias in social judgments of self and others (Batson, Early, & Salvarani, 1997; Ku, Wang, & Galinsky, 2010). We transfer this notion to third-person research. With an experiment, we investigate whether perspective taking affects judgments of message effects on self and others for desirable and undesirable media messages.

First- and Third-Person Perceptions as Social Judgments

Meta-analytical research shows that *desirability of message influence* is the most important predictor for self–other discrepancies in media effects judgments (Sun, Pan, & Shen, 2008). In third-person research a message is typically considered desirable if it is assumed to lead to beneficial consequences (Gunther & Mundy, 1993, p. 60). An undesirable message, on the contrary, is defined as having "potentially harmful consequences for the audience" (Gunther & Mundy, 1993, p. 60). For instance, while adolescents believe prosmoking ads to have a stronger influence on others than on themselves, they assume that antismoking ads more strongly affect their own judgment of smoking than others' (Henriksen & Flora, 1999). Andsager and White (2007, p. 59) suggested that perceived message effect desirability is strongly linked to source evaluation—but criticize that systematic research about this is lacking. However, a more recent study shows that if source credibility is rated low, media effects are judged as less beneficial (Wei, Lo, & Lu, 2011). Thus, if a source is not judged trustworthy and credible, perceived message effect desirability is also subverted.

Research has tried to explain why a gap in message effect judgments on self and others occurs and why it depends on message desirability (Tal-Or, Tsfati, & Gunther, 2009). It has been demonstrated that different perceptual mechanisms are at work when judging media influence on self and others (McLeod et al., 2001). The assessment of message effects on the self largely follows a *motivational* logic (Tal-Or et al., 2009, pp. 103–104). Studies have found links between the assessment of message effects on the self and the establishment and maintenance of a positive self-image (David & Johnson, 1998; Duck & Mullin, 1995; Gunther & Mundy, 1993; Tal-Or & Tsfati, 2007): If a message is deemed to have desirable consequences, it serves the self-image to regard oneself as susceptible to it. If, however, a message is assumed to have harmful effects, the self is seen in a more positive light when judged unaffected by the message. Against the background of this *self-*

enhancement mechanism, we hypothesize: A desirable message will lead individuals to assess message influence on themselves stronger than an undesirable message (H1).

At the same time, existing evidence suggests that assessment of media influence is a *cognitive phenomenon* not resulting from message desirability but from heuristic considerations about, e.g., others' perceived exposure to the message in question (Tal-Or et al., 2009). We thus assume that assessment of message influence on indistinct others will be independent of message desirability (H2). As a consequence, an undesirable message will lead individuals to assess message influence on others stronger than on themselves (*TPP*; H3a), whereas a desirable message will lead them to assess message influence on themselves stronger than on others (*FPP*; H3b).

First- and Third-Person Perceptions and Perspective Taking

In the context of motivational explanations, it has been shown that impression management contributes to the occurrence of TPPs (Tal-Or & Drukman, 2010). More specifically, *self-monitoring* makes it more likely that individuals publicly downplay their own perceived susceptibility but at the same time more openly admit to themselves that media messages affect them. A more reflected self-perception seems to reduce bias in the perception of own media susceptibility. Against this light, it appears important to explore how a more reflected view of others might affect TPPs and FPPs.

In the social judgment literature, the attempt to see things from another person's point of view has been called *perspective taking* (Batson et al., 1997). Studies have demonstrated that perspective taking reduces stereotypical judgments of others (Galinsky & Moskowitz, 2000; Todd, Bodenhausen, Richeson, & Galinsky, 2011; Todd, Galinsky, & Bodenhausen, 2012). More specifically, perspective taking leads to cognitive representations of others that are closer to the self-perception (Davis, Conklin, Smith, & Luce, 1996; Epley, Keysar, Van Boven, & Gilovich, 2004) but also to cognitive representations of the self that are closer to existing stereotypes about others (Ku et al., 2010).

Similarly, it has been shown that priming individuals to see themselves as more similar to others reduces TPPs (Shen et al., 2015). Perspective taking could trigger such an *assimilation* of self and others. We thus propose that perspective taking will lead individuals to exhibit weaker TPPs for an undesirable message (H4a) and weaker FPPs for a desirable message (H4b). Since existing research from social psychology has unveiled effects of perspective taking on both self and other assessments, we additionally ask whether observable effects of perspective taking on TPPs or FPPs trace back to effects on assessment of message influence on self or others (RQ1).

Method

Participants

A total of 454 participants (62.8% female; age: $M = 34.04$, $SD = 12.99$) took part in the study. Participants were recruited from a German online access panel. The sample is diverse with regard to age and gender.

Design

The study employed a 2 (perspective-taking instruction vs. no instruction) x 2 (desirable vs. undesirable stimulus) mixed factorial design.

Instruction

Participants either received perspective-taking or no instructions prior to reading the stimulus article. Perspective taking was triggered by instructing participants: "While reading the article, please try to see things from the perspective of other people who might read this interview. Take on the perspective of these other readers." This instruction was adopted from other studies where similar wordings were successfully applied to manipulate perspective taking (e.g., Davis et al., 1996; Galinsky & Moskowitz, 2000). After stimulus confrontation, participants in the perspective-taking condition were reminded of their task: "While reading, you have just taken over the perspective of other readers. Please try to remember how you felt while answering the following questions."

Stimulus material

Two versions of an interview on the health risks of pretanning before sunbathing served as stimulus material. The two text versions were completely fabricated (desirable stimulus article: 391 words; undesirable stimulus article: 377 words). The desirable condition featured an interview with a fictitious cancer researcher who was introduced as a renowned expert by the interviewer. The interviewee argued against pretanning, claiming that it does not protect from sunburn but increases the risk of skin cancer. The undesirable condition featured an interview with a representative of the tanning lobby, who argued that pretanning prevents skin cancer. While the expert's arguments were not directly commented on by the interviewer, the representative of the tanning lobby was occasionally discounted by the interviewer. Moreover, both interviews were accompanied by a fact box (33 words) containing background information on scientific evidence for an increased cancer risk through pretanning. These message features were tailored to challenge the tanning lobbyist's perceived credibility and trustworthiness and, that way, reduce perceived message effect desirability.

Procedure

The study was conducted as a self-administered online survey. Participants were instructed that the survey dealt with media coverage on a health issue. After five questions, they were presented with one of the two stimulus versions to which they were randomly assigned. Since the arguments within the interview are an essential part of the manipulation, we decided to exclude participants who viewed the stimulus for less than 15 seconds from analysis. In the perspective-taking condition, also participants who viewed the instruction less than 5 seconds were excluded. This left us with a sample of n = 431 participants.

Measures

Assessment of media influence on self and others

Perceived media influence on self was measured using the item "The arguments of the interviewee have (1 = *no influence* to 7 = *a very strong influence*) on my judgments" (M = 3.25; SD = 2.10). Presumed influence on others was measured accordingly: "The arguments of the interviewee have (1 = *no influence* to 7 = *very strong influence*) on the judgments of the general population" (M = 3.91; SD = 1.22).

Topic involvement

In order to control for possible effects of thematic involvement, we measured the frequency of exposure to artificial UV light using the item "How often do you usually go to a solarium or use other sources of artificial UV light?" Answers were given on a scale from 1 (*never*) to 7 (*very often*) (M = 3.25; SD = 2.10).

Manipulation check measures

For the purpose of manipulation check, we measured the presumed desirability of being influenced by the arguments of the interviewee. Three items such as "when judging pretanning one should be guided by the arguments presented in the interview" were measured on a Likert-type scale ranging from 1 (*I do not agree*) to 7 (*I fully agree*). They were merged into a mean-score index (Cronbach's α = .91; M = 3.47; SD = 2.15). Moreover, we measured source credibility (M = 3.70; SD = 2.17) and trustworthiness (M = 3.50; SD = 2.26) using a bipolar scale ranging from 1 (*incredible/not trustworthy*) to 7 (*credible/trustworthy*).

Results

Manipulation Check

Independent samples t-test results indicate that the stimulus version that was tailored to provoke desirability was judged significantly more desirable by the participants (M = 5.34; SD = 1.20) than the undesirable stimulus, M = 1.58; SD = 0.84; $t(429) = 37.52$; $p \leq .001$; Cohen's d = 3.63. Moreover, the undesirable stimulus was also evaluated significantly less credible (M = 2.12; SD = 1.53) and less trustworthy (M = 1.56; SD = 1.00) than the desirable version—credibility: M = 5.27; SD = 1.44; $t(428) = 21.93$; $p \leq .001$; Cohen's d = 2.12; trustworthiness: M = 5.43; SD = 1.33; $t(425) = 34.00$; $p \leq .001$; Cohen's d = 3.29. It can thus be assumed that the desirability manipulation worked as intended.

Tests of the Hypotheses and the Research Question

To test the hypotheses and the research question, we conducted a series of analyses of covariance (ANCOVA) with judgments of media influence as the dependent variables,

the two experimental manipulations as factors, and topic involvement as covariate. For all calculated models, there is no significant effect of the covariate.

Results show a significant main effect of the manipulation of message effect desirability on the presumed message influence on self, $F(1,426) = 246.06$; $p \leq .001$; part. $\eta^2 = .366$. However, no significant effect can be observed for presumed message influence on others, $F(1,426) = 2.82$; $p = .094$; part. $\eta^2 = .007$. This supports H1–H2. However, H2 is a null hypothesis that is privileged by standard statistical testing procedures as the one applied here (Nickerson, 2000). This should be kept in mind when interpreting the results pertaining to H2.

Mean values (see Table 1) suggest that the desirable stimulus did in fact lead to a FPP, whereas the undesirable stimulus provoked a TPP. Paired *t*-tests indicate that these differences are significant within all four experimental groups—desirable stimulus/perspective taking: $t(108) = 2.67$; $p = .009$; Cohen's $d = 0.35$; desirable stimulus/control group: $t(107) = 4.51$; $p \leq .001$; Cohen's $d = 0.56$; undesirable stimulus/perspective taking: $t(102) = -8.58$; $p \leq .001$; Cohen's $d = -1.03$; undesirable stimulus/control group: $t(110) = -14.56$; $p \leq .001$; Cohen's $d = -1.89$. Thus H3a–H3b are supported.

Main effects of the perspective-taking instruction on presumed influence on self—$F(1,426) = 1.08$; $p = .300$; part. $\eta^2 = .003$—and presumed influence on others—$F(1,426) = 0.60$; $p = .438$; part. $\eta^2 = .001$—were nonsignificant. However, there is a significant interaction effect of perspective taking and stimulus version for presumed message influence on self, $F(1,426) = 10.70$; $p \leq .001$; part. $\eta^2 = .024$. In contrast to that, the interaction term had no significant influence on presumed influence on others, $F(1,426) = 0.23$; $p = .629$; part. $\eta^2 = .001$.

To interpret the observable interaction effects, a series of Bonferroni's post hoc tests were conducted for the two dependent variables (see Table 1). Results indicate that the four experimental conditions do not differ significantly in their assessment of message influence on others. However, the assessment of message influence on self is significantly higher for the two groups that received the desirable stimulus. Moreover, perspective taking led to a significantly higher estimation of the undesirable message's influence on self as compared to the control group. The observed interaction can

Table 1 Influence of Perspective Taking on FPPs and TPPs

		n	Perceived influence on self	Perceived influence on others
Desirable stimulus	Perspective taking	109	4.32[a] (1.79)	3.80[a] (1.12)
	Control group	108	4.68[a] (1.75)	3.83[a] (1.20)
Undesirable stimulus	Perspective taking	103	2.34[b] (1.70)	3.94[a] (1.39)
	Control group	111	1.65[c] (1.41)	4.09[a] (1.16)

Note. $n = 431$. Values are mean scores on a 7-point scale ranging from 1 (*no influence*) to 7 (*very strong influence*) with standard deviations in parentheses. Means with identical superscripts within columns do not differ significantly at $p \leq .05$ according to Bonferroni's post hoc test.

hence be interpreted as a conditional effect of perspective taking that only occurs for the undesirable stimulus. This supports H4a, while H4b receives no support. Pertaining to RQ1, results indicate that perspective taking only influenced presumed message influence on self but not on others.

Discussion

The results of this study underline that perspective taking, i.e., adapting the point of view of other persons, can have debiasing effects in the context of TPPs. More specifically, it has been shown that perspective taking leads individuals to see media influence on themselves in a more realistic and less biased way. Surprisingly, however, this effect only occurred for an undesirable message. This might be explicable by the fact that, for the desirable stimulus, assessments of message effects on self and others were already pretty similar (and thus less biased) without engaging in perspective taking. This does not leave much room for detecting debiasing effects of perspective taking. For third-person research in general, the present results indicate that self-assessment of message effects seems to greatly depend on context information such as message desirability or the perceptual perspective. On the contrary, estimation of media influence on others turned out to be independent of message desirability in the present study.

Against that background, it does not come as a surprise that perspective taking did not influence the assessment of message influence on others. At first sight, this seems to indicate that the effect of perspective taking is motivational in nature because variance in presumed media influence on the self is deemed to have a motivational origin. However, we argued that perspective taking leads to an assimilation of cognitive representations of self and others. In conclusion, results suggest an anchoring function of the indistinct others for the evaluation of message influence on self. This has to be judged as a cognitive effect that interferes with the motivation to see oneself in the best possible way (also see Shen et al., 2015). However, it could also be true that perspective taking has a direct motivational effect in a way that it reduces the emotional distance between self and others and therefore makes individuals less motivated to see themselves as superior to others. Future research on perspective taking will need to explore more thoroughly whether its effects are merely cognitive or also affective.

For third-person research, our findings underscore the importance of looking at both cognitive and motivational mechanisms for the occurrence of FPPs and TPPs. If we assume that perspective taking is a cognitive process, our results indicate that cognitive phenomena can interfere with the motivated self-evaluation behind TPPs. These results corroborate claims for further synergizing motivational and cognitive explanations of TPPs and FPPs (Shen et al., 2015).

The present study has its limitations. Future research should consider perspective-taking effects in TPP and FPP for a wider variety of groups of others. It can be assumed that for more distinct others perspective taking could lead to self-

anchoring rather than other-anchoring effects. Furthermore, it should also be tested whether perspective taking similarly affects TPPs for other types of media messages, e.g., for narrative content or advertising. Finally, future studies will have to explore in more detail the intertwined role of message desirability and source credibility. This study indicated that both are strongly related when it comes to triggering TPPs. This provides momentum to TPP research in times of posttruth politics.

Nevertheless, the present research has demonstrated that perspective taking can be a way of decreasing the bias in media effects perceptions. Thinking about other audience members could lead individuals to a more realistic self-assessment when it comes to media effects. To judge which of the two assessments comes closer to the truth and is thus less biased is almost impossible. This would require information about actual message influence. However, it appears to be clear that the perceptual gap constitutes a bias. Narrowing the gap seems desirable. If perspective taking raises awareness of one's own susceptibility, it could contribute to a better media literacy of the audience and to a more reflected media use. For third-person research, the findings obtained here seem to offer a way of more closely linking cognitive and motivational explanations of TPP and FPP. Considering the perceptual perspective as a factor in message effect judgments can thus help to improve our understanding of the intraindividual processes that they are based upon.

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