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Journal of Experimental Social Psychology 41 (2005) 515-526

Journal of Experimental Social Psychology

www.elsevier.com/locate/jesp

We are, therefore they aren't: Ingroup construal as a standard of comparison for outgroup judgments $\stackrel{\text{\tiny}}{\sim}$

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> Received 8 January 2004; revised 26 October 2004 Available online 10 February 2005

Abstract

Five studies tested the assumptions: (a) that ingroups are habitually used as a standard of comparison for outgroup judgments, and (b) that outgroup judgments are generally contrasted away from a momentary construal of the ingroup. Results generally support these assumptions. Experiments 1 and 2 demonstrated increased activation levels of ingroup knowledge as a result of corresponding outgroup judgments. Experiments 3 and 4 showed that outgroup judgments depend not only on cognitively accessible outgroup exemplars, but also on accessible ingroup exemplars. Finally, Experiment 5 demonstrated that the impact of accessible ingroup exemplars on outgroup judgments is mediated by changes in the construal of the ingroup, such that: (a) outgroups were judged lower with regard to a given trait the higher participants perceived their ingroup with regard to that trait, and (b) controlling for the effect of ingroup construal attenuated the obtained effects on outgroup judgments.

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Social judgments are context dependent in a variety of ways. For instance, the interpretation of a particular behavior often depends on the situational context in which the behavior is observed (e.g., Snyder & Frankel, 1976; Trope, Cohen, & Alfieri, 1991; Trope, Cohen, & Maoz, 1988). In a similar vein, the same behavior may be judged differently as a function of the group membership of the actor (e.g., Duncan, 1976; Dunning & Sherman,

1997; Gawronski, Geschke, & Banse, 2003; Hugenberg & Bodenhausen, 2003; Sagar & Schofield, 1980).

A special case of such context effects on social judgments is the influence of different comparison standards (Festinger, 1954). Perceivers often tend to judge the same object differently, depending on the standard of comparison they employ. For example, people may judge themselves as more attractive when they compare themselves to an unattractive person. However, they may judge themselves as less attractive when they compare themselves to an attractive person. Since nearly any kind of social judgment implies a comparison to a standard (Mussweiler, 2003), changing standards can have strong effects on how people judge a particular target (e.g., Biernat & Manis, 1994; Higgins & Lurie, 1983; Kahneman & Miller, 1986).

The main goal of the present research was to investigate the role of comparison standards for judgments about outgroups. Specifically, we propose: (a) that people habitually use a construal of their ingroup as a

This research was partially supported by a grant from the German Science Foundation (DFG) to the first author (Ga 747/1-1). Experiment 3 was conducted while the first and the third author were affiliated with Humboldt-University Berlin, Germany. We thank Kai Epstude, Thomas Mussweiler, and Katja Rüter for helpful comments on an earlier version of this article; Angela Chiong, Scott Gelman, Julia Grafe, Sara Hart, Iris Petzold, and Kimmy Van for their help in collecting the data; and Johanna Zukova for her help in preparing the stimulus material.

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^{0022-1031/\$ -} see front matter © 2005 Elsevier Inc. All rights reserved. doi:10.1016/j.jesp.2004.11.002

standard of comparison for judgments about outgroups, and (b) that perceivers usually try to differentiate between outgroups and their ingroup, thus leading to contrast effects with respect to ingroup construals and outgroup judgments. For instance, students of psychology may judge students of other areas as extraverted if they consider psychology students to be introverted. However, psychology students may judge students of other areas as introverted if they consider their peers to be extraverted. Most importantly, contextual influences on psychology students' perceptions of their peers may not only affect their judgments about psychology students in general. Rather, such influences may also affect their judgments about students of other areas, in that those judgments are habitually based on a contrast with psychology students.

Self-reference and differentiation in social comparison

Our first hypothesis, that ingroups are habitually used as a standard of comparison for outgroup judgments, is consistent with a basic notion of social identity theory (Tajfel & Turner, 1986) and self-categorization theory (Turner, 1987). Specifically, these theories assert that outgroup judgments should generally trigger an intergroup perspective, whereas ingroup judgments can trigger either an intragroup or an intergroup focus. However, even though previous research offers clear evidence for these assumptions (e.g., Haslam, Oakes, Turner, & McGarty, 1995), we are not aware of any study that has directly tested their implications for processes of social comparison.

More direct evidence for self-referential comparison processes comes from studies that investigated the use of habitual standards on the individual level. Specifically, these studies have consistently shown that judgments about other individuals often employ the self as a standard of comparison (e.g., Dunning & Hayes, 1996; Holyoak & Gordon, 1983; Karylowski, 1990; Srull & Gaelik, 1983). Dunning and Hayes (1996), for example, found that participants provided descriptions about their own behavior more quickly when they had previously judged another individual with respect to same behavior. This result suggests that people activate corresponding knowledge about themselves when judging other individuals. Applied to present case, one could argue that the predominance of self-referential comparisons also holds at the group level, such that people base judgments about outgroups on a comparison to their ingroup (see also Mummendey & Wenzel, 1999). Accordingly, the same outgroup may be judged differently, depending on people's momentary construal of their ingroup.

Notwithstanding the proposed role of ingroups as a standard of comparison, merely comparing ingroups and outgroups has uncertain implications for the particular effect such a comparison will have, because it could lead either to assimilation or to contrast effects on outgroup judgments (Mussweiler, 2003). Drawing on previous evidence for the accentuation hypothesis (Tajfel & Wilkes, 1963), we argue that, by default, people try to differentiate between social groups, and thus between their ingroup and corresponding outgroups (e.g., Krueger & Clement, 1994; Krueger, Rothbart, & Sriram, 1989). According to Cadinu and Rothbart (1996, p. 662). for example, "judges should, on the basis of what they know about one group, tend to infer the opposite about another group, and this tendency should exist for judges whether or not they are members of the relevant target groups." Applied to the present case, this reasoning implies that people should generally contrast their judgments about an outgroup away from their momentary construal of the ingroup. For instance, people may judge an outgroup as less favorable when they have a positive construal of their ingroup, but they may judge an outgroup as more favorable when they have a negative construal of their ingroup.

Overview of the experiments

The proposed sequence of processes in outgroup judgments is depicted in Fig. 1. Specifically, we argue that outgroup-related inferential goals (Step 1) will habitually elicit a judgment about the ingroup (Step 2). Outgroups are then differentiated from this spontaneous construal of the ingroup (Step 3), which in turn leads to a contrast effect on outgroup judgments (Step 4). In order to provide empirical evidence for these processes, we conducted five experiments. Experiments 1 and 2 were concerned with the impact of outgroup-related inferential goals (Step 1) on the cognitive accessibility of the ingroup (Step 2). These experiments tested whether merely judging an outgroup influences the activation



Fig. 1. Proposed sequence of processes involved in outgroup judgments.

level of relevant ingroup knowledge. Specifically, Experiments 1 and 2 manipulated outgroup-related inferential goals (Step 1) and then measured the activation level of relevant ingroup knowledge (Step 2) with a lexical decision task (Experiment 1) and a judgment facilitation task (Experiment 2). If ingroups are habitually used as a standard of comparison, merely judging an outgroup should be sufficient to increase the activation level of relevant ingroup knowledge. Expanding on these studies, Experiments 3 and 4 were particularly concerned with the proposed differentiation of outgroup judgments from momentary ingroup construals (Step 3). For this purpose, these studies manipulated participants' construal of their ingroup (Step 2) and then assessed judgments of corresponding outgroups (Step 4). Experiment 3 manipulated ingroup construals by providing information about an ingroup member; Experiment 4 manipulated ingroup construals by asking participants to generate ingroup members with a specific trait. If outgroup judgments are generally contrasted from a momentary construal of the ingroup, contextually induced changes in the perception of the ingroup should lead to diametrical changes in judgments about outgroups. Finally, Experiment 5 addressed the proposed connection between ingroup construal (Step 2) and ingroup-outgroup accentuation (Step 3) more directly. In this study, we manipulated participants' construal of their ingroup (Step 2) and then assessed judgments of corresponding outgroups (Step 4). In contrast to Experiments 3 and 4, however, we additionally assessed participants' construal of their ingroup in order to test whether the obtained effects on outgroup judgments are indeed mediated by participants' construal of their ingroup.

Experiment 1

The main objective of Experiment 1 was to test whether merely judging an outgroup influences the cognitive accessibility of the ingroup category. If people habitually use their ingroup as a standard of comparison for outgroup judgments, then merely judging an outgroup should result in an increased activation level of the corresponding ingroup category. In order to test this assumption, participants were asked to make several judgments about a particular outgroup. Immediately afterwards, the activation level of corresponding and non-corresponding ingroup categories was assessed with a lexical decision task.

Method

Participants and design

A total of 47 Northwestern students of US American origin (34 female; 13 male) took part in a battery of two experiments on social judgment including the present study and a second one on impression formation. Order of the two studies was counterbalanced and did not affect any of the dependent measures. Subjects received credit for experiment participation requirements. Participants were randomly assigned to judge one of two outgroups (either Germans or Harvard students) and then completed measures of the accessibility of ingroup categories concerning both Americans and Northwestern students. It was hypothesized that merely judging a particular outgroup would result in increased accessibility of associates of the corresponding ingroup category (e.g., judging "Germans" would activate the category "Americans" but not "Northwestern students").

Procedure

On arrival, participants were welcomed by an experimenter and seated in front of a personal computer. Written instructions explained that the study concerned judgments about social groups. For this purpose, participants would be asked to indicate their personal opinions about one particular social group. Following the instructions, participants were asked to judge either Harvard students or Germans (i.e., outgroups) with respect to a total of four different traits (efficient, outgoing, studious, and sociable). These judgments were assessed with rating scales ranging from 1 (very low) to 7 (very high). Immediately afterwards, participants completed a lexical decision task designed to assess the activation level of the ingroup categories "Northwestern students" and "Americans." Specifically, participants were presented eight Northwestern-related words (Ladycats, Wildcard, Evanston, Purple, Kellogg, Norris, Lake, and Northwestern), eight American-related words (Freedom, Clinton, Bush, Capitalism, Flag, Liberty, Power, and America), and 16 corresponding non-words, which were selected on the basis of pretests. Words and non-words were randomly presented in the center of the screen. Participants' task was to press a right-hand key ("5" of the number pad) when a meaningful English word was presented on the screen, and a left hand key ("A") when a meaningless non-word was presented on the screen. Participants were instructed to respond as quickly as possible without making too many errors.

Results and discussion

If participants habitually use their corresponding ingroup as a standard of comparison for outgroup judgments, then the activation level of the corresponding ingroup category should be higher, compared to a noncorresponding ingroup category. Hence, participants should be faster in reacting to Northwestern-related words when they had previously judged Harvard students than when they had previously judged Germans. In contrast, participants should be faster in reacting to



Fig. 2. Mean response latencies in milliseconds for the identification of ingroup-related words as a function of ingroup category (Northwestern students vs. Americans) and prior outgroup judgment (Harvard students vs. Germans), Experiment 1.

American-related words when they had previously judged Germans than when they had previously judged Harvard students.

In order to test this assumption, response latencies were first log-transformed (Fazio, 1990) and then submitted to a 2 (outgroup) \times 2 (ingroup) mixed-model analysis of variance (ANOVA) with the first variable as between-subjects factor and the second as within-subjects factor.¹ Consistent with the present predictions, this analysis revealed a significant two-way interaction of ingroup category and outgroup judgment, $F(1,45) = 4.00, p = .05, \eta^2 = .082$. The interaction pattern displayed in Fig. 2 indicates that participants were faster in responding to Northwestern-related words when they had judged Harvard students before than when they had judged Germans before. In contrast, participants were faster in responding to American-related words when they had judged Germans before than when they had judged Harvard students before. In other words, participants were faster in responding to ingroup related words when they had previously judged a corresponding outgroup than when they had previously judged a non-corresponding outgroup. These results are consistent with the assumption that merely judging an outgroup increases the cognitive accessibility of the corresponding ingroup category.

Even though the present findings are consistent with our assumption that people habitually use a construal of their ingroup as a standard of comparison for outgroup judgments, one could object that these results indicate only a spontaneous activation of the category. However, they do not indicate that participants activate judgmentrelevant ingroup knowledge that could be employed for a comparison. In other words, it is not clear whether participants only activated their ingroup category without using this category as a standard of comparison, or whether the increased activation level of the ingroup category arises in the course of making a judgment about the ingroup. The second experiment addressed this question more directly.

Experiment 2

The main goal of Experiment 2 was to test whether judgments about outgroups influence the activation level of judgment-relevant ingroup knowledge. In order to test this assumption, we employed a judgment facilitation paradigm successfully used in previous studies on social comparison (e.g., Dunning & Hayes, 1996; Mussweiler & Bodenhausen, 2002) and judgmental anchoring (e.g., Mussweiler & Strack, 1999; Strack & Mussweiler, 1997). Specifically, we first asked participants to judge an outgroup with respect to a given trait. Immediately afterwards, participants were asked to judge either a corresponding or a non-corresponding ingroup with respect to the same trait. As a dependent measure, we assessed participants' response latency for their ingroup judgments. If perceivers habitually use their ingroup as a standard of comparison for judgments about outgroups, subsequent ingroup judgments should be faster when ingroup and outgroup correspond to one another (i.e., when participants already judged the respective ingroup in the course of making a judgment about the outgroup), but not when ingroup and outgroup do not align (i.e., when participants did not make a judgment about the respective ingroup before).

Method

Participants and design

A total of 75 Northwestern students of US American origin (46 female; 29 male) took part in a battery of two experiments on social judgment, including the present study and a second one on impression formation. Order of the two studies was counterbalanced and did not affect any of the dependent measures. Subjects received credit for experiment participation requirements. Participants were randomly assigned to the conditions of a 2 (outgroup judgment target: Harvard students or Germans) \times 2 (ingroup judgment target: Northwestern students or Americans) between-subjects design.

Procedure

On arrival, participants were welcomed by an experimenter and seated in front of a computer. Written instructions explained that the present study was concerned with judgments about social groups. For this purpose, participants would be asked to indicate their personal opinions about a number of different social

¹ Even though analyses were conducted with log-transformed data, cell means are reported in milliseconds for ease of interpretation.



Fig. 3. Mean response latencies in milliseconds for ingroup judgments as a function of ingroup category (Northwestern students vs. Americans) and prior outgroup judgment (Harvard students vs. Germans), Experiment 2.

groups. Following the instructions, participants were first asked to judge the efficiency of either Harvard students or Germans (i.e., outgroups) on a rating scale ranging from 1 (very low) to 7 (very high). Immediately afterwards, participants were asked to judge the efficiency of either Northwestern students or Americans (i.e., ingroups) on a scale with the same response format. As a dependent measure, participants' response latency for their ingroup judgment was assessed.

Results and discussion

Response latencies for ingroup judgments were first log-transformed (Fazio, 1990) and then submitted to a 2 $(outgroup) \times 2$ (ingroup) ANOVA.² This analysis revealed a significant two-way interaction, F(1,70) =7.02, p = .01, $\eta^2 = .090$ (see Fig. 3). Consistent with our predictions, the interaction pattern indicates that participants were faster in judging Northwestern students when they had judged Harvard students before than when they had judged Germans before. In contrast, judgments about Americans were faster when participants judged Germans before than when they judged Harvard students before. In other words, participants were faster in judging their ingroup with regard to a specific trait when they had previously judged a corresponding outgroup with regard to the same trait than when they had previously judged a non-corresponding outgroup. These results indicate that merely judging an outgroup not only leads to a spontaneous activation of the ingroup category, but also to an activation of judgmentrelevant ingroup knowledge.

However, even though these findings are consistent with our assumption that ingroups are habitually used as a standard of comparison for outgroup judgments, it is still an open question whether perceivers actually use the activated ingroup knowledge when making judgments about the outgroup. Moreover, the present results are still ambiguous as to whether perceivers actually contrast outgroup judgments from their spontaneous construal of their ingroup, as we hypothesized. These assumptions were addressed in Experiment 3.

Experiment 3

Several models of social judgment suggest that accessible exemplars play an important role in judgments about social groups (e.g., Lord & Lepper, 1999; Smith & Zárate, 1992). This assumption is consistent with a number of studies demonstrating that recently encountered members of a given group affect judgments about the group in general (e.g., Bless, Schwarz, Bodenhausen, & Thiel, 2001; Bodenhausen, Schwarz, Bless, & Wänke, 1995; Henderson-King & Nisbett, 1996; Sia, Lord, Blessum, Thomas, & Lepper, 1999; Wilder, Simon, & Faith, 1996). Applied to the present investigation, one could argue that cognitively accessible ingroup members should affect judgments about the ingroup in general (e.g., Marques, Yzerbyt, & Leyens, 1988) and thereby also influence judgments about corresponding outgroups. Moreover, given the present assumption that outgroup judgments are generally contrasted from a construal of the ingroup, cognitively accessible ingroup exemplars should lead to contrast effects in judgments about outgroups, such that positive ingroup exemplars should lead to less favorable judgments about the outgroup whereas negative ingroup exemplars should lead to more favorable judgments about the outgroup.

In order to test these assumptions, participants were presented a videotaped interview of either an ingroup member or an outgroup member who behaved either in a friendly or an unfriendly manner. Afterwards, evaluations of the outgroup in general were assessed. Drawing on previous evidence for the impact of cognitively accessible exemplars on group judgments (e.g., Bless et al., 2001; Bodenhausen et al., 1995; Henderson-King & Nisbett, 1996; Sia et al., 1999; Wilder et al., 1996), we expected a positive outgroup member to lead to more positive evaluations of the outgroup than a negative outgroup member. Going beyond previous demonstrations, however, we expected a positive ingroup member to lead to more negative evaluations of the outgroup as compared to a negative ingroup member.

Method

Participants and design

A total of 122 German psychology students (103 female, 19 male) participated in a study on impression

² Even though analyses were conducted with log-transformed data, cell means are reported in milliseconds for ease of interpretation.

formation, receiving credit for experiment participation requirements. Participants were randomly assigned to one of the four experimental conditions of a 2 (target's ethnic origin: German vs. Turkish) \times 2 (behavior: friendly vs. unfriendly) between-subjects design.

Procedure

On arrival, participants were welcomed by an experimenter and informed that they were taking part in a study on impression formation. The experimenter explained that a number of interviews had been conducted about public transport in Berlin (Germany) and that each participant would watch one of the videotaped interviews. One of four videos was then assigned by a random procedure. The videos consisted of a brief sequence in which a female interviewer approached either a typically German- or Turkish-looking male passerby (a confederate of the experimenters), asking if he had some time for a short interview concerning his satisfaction with the public transport system in Berlin. Questions and answers were scripted and held identical across the clips. The Turkish actor had a slight Turkish accent; the German actor had no foreign accent. Friendly and unfriendly behavior was operationalized by the target's nonverbal behavior (e.g., looking interested vs. disinterested) and the tone of his answers (e.g., happy vs. irritated). After a few questions, the target terminated the interview with the excuse to be in a hurry. As a function of the experimental conditions, this explanation was accompanied either by a smile (friendly behavior) or by a frown (unfriendly behavior). After watching the clip, participants were asked to indicate their impression of the target's behavior and to predict his behavior in a number of hypothetical situations. This task was followed by a questionnaire to assess prejudiced beliefs about Turkish people in general. Finally, participants were probed for suspicion, debriefed, and thanked for their participation.

Measures

Prejudice against Turkish people was assessed with a German version of Coenders, Scheepers, Sniderman, and Verberk's (2001) General Prejudice Scale.³ Prejudice was assessed with rating scales ranging from 1 to 5. In order to assure that the targets were actually perceived as Turkish or German, participants were asked to rate the target with respect to his ethnic origin (i.e., German,

Turkish) on two scales ranging from 1 (very unlikely) to 5 (very likely). Participants' judgments of the target's behavior were assessed on six dimensions (e.g., friendly, rude) which were rated on response scales ranging from 1 (not true) to 5 (true). In order to promote elaborate processing of the available exemplar information, participants were additionally asked to predict the target's behavior in 10 hypothetical situations that could elicit either positive or negative behavior (Gawronski et al., 2003). The subjective likelihood of negative behavior was rated on response scales ranging from 1 (very unlikely) to 5 (very likely).

Results and discussion

Manipulation checks

Ratings of the target's behavior were averaged into a single index of negative behavior by reverse coding positive behavioral dimensions (Cronbach's $\alpha = .89$). Submitted to a 2 (ethnic origin) \times 2 (behavior) ANOVA, this index revealed a theoretically uninteresting main effect of ethnicity, F(1, 118) = 36.80, p < .001, $\eta^2 = .238$, indicating that the behavior was rated more negatively when the target was German (M=3.54) than when he was Turkish (M = 2.87). More importantly, there was a significant main effect of behavior, F(1,118) = 133.18, $p < .001, \eta^2 = .530$, indicating that the behavior was rated more negatively when the target behaved in an unfriendly manner (M = 3.83) than when he behaved in a friendly manner (M = 2.58). This effect held for both the German target, F(1,59) = 48.23, p < .001, $\eta^2 = .450$, and the Turkish target, F(1,59) = 87.97, p < .001, $\eta^2 = .599$, and was not qualified by higher order interactions. The same main effect of behavior was obtained for the behavior prediction index (Cronbach's $\alpha = .73$), revealing higher scores in the prediction of negative behavior when the target was unfriendly (M = 3.07) than when he was friendly (M = 2.67), F(1, 118) = 19.44, p < .001, $\eta^2 = .141$. Again, this effect held for both the German target, F(1,59) = 13.18, p = .001, $\eta^2 = .183$, and the Turkish target, F(1,59) = 7.53, p = .008, $\eta^2 = .113$, and was not qualified by any higher order interaction. Moreover, a 2 (target ethnic origin: German vs. Turkish) $\times 2$ (behavior: friendly vs. unfriendly) $\times 2$ (rating category: Germanness vs. Turkishness) mixed-model ANOVA on category ratings revealed a significant two-way interaction between ethnic origin and rating category, F(1,118) = 131.11, p < .001, $\eta^2 = .526$, indicating that the German-looking target was rated as more likely to be German rather than Turkish (Ms = 4.23 vs. 1.52, respectively), F(1,60)=246.38, p < .001, $\eta^2 = .804$. In contrast, the Turkishlooking target was rated more likely to be Turkish rather than German (Ms = 2.31 vs. 3.13, respectively), $F(1,60) = 10.55, p = .002, \eta^2 = .150$. Taken together, these results indicate that both experimental manipulations can be regarded successful.

³ Coenders et al.'s (2001) General Prejudice Scale is an adaptation of Pettigrew and Meertens' (1995) Subtle and Blatant Prejudice Scales. The General Prejudice Scale includes all items of the Subtle and Blatant Prejudice Scales, the only exception being the exclusion of all items assessing the exaggeration of cultural differences. For the present purpose, Coenders et al.'s adaptation was preferred over Pettigrew and Meertens' original scale, because the former (in contrast to the latter) does not explicitly require a comparison between ingroup and outgroup.

Prejudice against the outgroup

Prejudice ratings were merged into a single index by calculating mean values (Cronbach's $\alpha = .83$). This index was submitted to a 2 (ethnic origin) $\times 2$ (behavior) ANOVA, revealing a significant two-way interaction, $F(1, 118) = 5.36, p = .02, \eta^2 = .043$ (see Fig. 4). Consistent with previous research on exemplar effects on group judgments (e.g., Bless et al., 2001; Bodenhausen et al., 1995; Henderson-King & Nisbett, 1996; Sia et al., 1999; Wilder et al., 1996), participants who watched a Turkish target showed a non-significant, but recognizable tendency to exhibit a lower level of prejudice against Turkish people when this target was friendly than when he was unfriendly, F(1,59) = 1.04, p = .31, $\eta^2 = .017$. More novel, however, was the finding that respondents who watched a German target exhibited a significantly higher level of prejudice against Turkish people when this target was friendly than when he was unfriendly, $F(1,59) = 5.31, p = .02, \eta^2 = .083.$

These results further corroborate our hypothesis that people habitually use their ingroup as a standard of comparison for outgroup judgments. Moreover, the present findings offer first evidence for the assumption that outgroup judgments are contrasted away from a momentary construal of the ingroup. Consistent with this assumption, participants showed a higher level of prejudice against a corresponding outgroup when they saw a videotaped interview of a positive ingroup exemplar than when they saw a negative ingroup exemplar. These results indicate that outgroup judgments are not only affected by cognitively accessible outgroup members, as prior research has shown (e.g., Bless et al., 2001; Bodenhausen et al., 1995; Henderson-King & Nisbett, 1996; Sia et al., 1999; Wilder et al., 1996), but also by accessible ingroup exemplars. Specifically, it seems that ingroup exemplars affect the subjective construal of the ingroup, which in turn is used as a standard of comparison for judgments about the outgroup.



Fig. 4. Mean scores of prejudice against outgroup as a function of target group membership (ingroup vs. outgroup) and target behavior (friendly vs. unfriendly), Experiment 3.

Experiment 4

The main goal of Experiment 4 was to replicate the findings obtained in Experiment 3 using a different manipulation of ingroup construal. Rather than providing participants with information about ingroup members, participants in Experiment 4 were asked to generate ingroup members with a specific characteristic. This manipulation was inspired by previous research on the ease-of-retrieval effect, showing that people often base their judgments on meta-cognitive inferences from the experienced ease of retrieving information rather than on the particular content or amount of retrieved information (for a review, see Schwarz, Bless, Wänke, & Winkielman, 2003). In a study by Schwarz et al. (1991), for example, participants were asked to recall either a high or a low number of assertive behaviors that they had engaged in, and to indicate their general level of assertiveness afterwards. In contrast to what would be expected by a mere accessibility effect (cf. Tversky & Kahneman, 1973), participants rated themselves higher in assertiveness when they had to recall a low number of assertive behaviors than when they had to recall a high number of assertive behaviors. According to Schwarz et al. (1991), these results indicate that participants based their self-judgments on the experienced ease of retrieving information rather than on the particular content or amount of the activated information. More precisely, participants seem to have inferred that they are not very assertive when the recollection of assertive behaviors was difficult (high number), but they seem to have inferred that they are very assertive if the recollection of assertive behaviors was easy (low number).

Even though the particular processes underlying easeof-retrieval effects are still somewhat controversial (e.g., Schwarz et al., 2003; Tormala, Petty, & Briñol, 2002; Wänke & Bless, 2000), Schwarz et al.'s manipulation of self-judgments seems also suitable to influence participants' momentary construal of their ingroup, and thus to investigate the impact of ingroup construals on outgroup judgments. Specifically, participants may assume that their ingroup has a high level of a given trait only when it is easy to generate ingroup exemplars with a high trait level, but not when it is difficult to generate relevant ingroup exemplars. Accordingly, ingroups should be judged higher with respect to a given trait when they had to generate a low number of ingroup members with this trait (easy) than when they had to generate a high number of ingroup members with this trait (difficult). These momentary construals of the ingroup should in turn affect judgments about outgroups, such that outgroups are judged higher with regard to the trait in question when participants perceive their ingroup to have a low level of that trait than when they perceive their ingroup to have high level of that trait. This reasoning implies that outgroups should be judged higher with

respect to a given trait when participants had to generate a high number of ingroup members with this trait (difficult = low trait level for ingroup) than when they had to generate a low number of ingroup members with this trait (easy = high trait level for ingroup).

Method

A total of 32 psychology students (25 female; 7 male) were asked to think up either 3 or 10 psychology students (i.e., ingroup members) who are either high in introversion or high in extraversion. Thus, the experiment had 2 (number of ingroup exemplars) $\times 2$ (trait dimension) betweensubjects design. Assignment to the experimental conditions was random. After completing the exemplar generation task, participants were asked to judge students majoring in 10 areas other than psychology (computer science, mathematics, physics, languages, pedagogy, chemistry, medical science, law, economics, and biology) with respect to their introversion/extraversion on 7-point scales ranging from -3 (very introverted) to +3 (very extraverted). The experiment was run in a mass testing session in an undergraduate course on research methods at the end of the semester. Subjects received a candy bar for participation.

Results and discussion

Judgments of students majoring in areas other than psychology were averaged into a single index by calculating mean values (Cronbach's $\alpha = .64$). Submitted to a 2 (number of ingroup exemplars) × 2 (trait dimension) ANOVA, this index revealed a significant two-way interaction of trait level and number of exemplars, F(1,28)=10.35, p=.003, $\eta^2 = .270$ (see Fig. 5). Consistent with the present predictions, participants judged non-psychology students as more extraverted when they had to generate a low number of introverted psychology students (easy) than when



Fig. 5. Mean scores of judged extraversion of outgroup members as a function of trait type of generated ingroup exemplars (introverted vs. extraverted) and number of generated ingroup exemplars (3 vs. 10), Experiment 4.

they had to generate a high number of introverted psychology students (difficult). In contrast, participants judged non-psychology students as less extraverted when they had to generate a low number of extraverted psychology students (easy) than when they had to generate a high number of extraverted psychology students (difficult). Moreover, non-psychology students were judged higher in extraversion when participants had to generate a low number of introverted psychology students than when they had to generate a low number of extraverted psychology students. In contrast, participants judged non-psychology students as less extraverted when they had to generate a high number of introverted psychology students than when they had to generate a high number of extraverted psychology students. Taken together, these results corroborate our assumption that ingroups are habitually used as a standard of comparison for outgroup judgments, and that changes in the momentary construal of one's ingroup also affect judgments about outgroups.

Experiment 5

In order to keep the proposed comparison between ingroups and outgroups as spontaneous as possible, we deliberately decided not to include measures of ingroup construal in Experiments 3 and 4. This strategy may be considered appropriate given that explicit requests for an ingroup judgment may stimulate social comparisons that participants would otherwise not engage in. However, this strategy also confers the disadvantage of precluding strong conclusions about the mediating processes postulated in this paper. Specifically, it is not clear if the effects on outgroup judgments obtained in Experiments 3 and 4 were indeed mediated by participants' construal of their ingroup. The main goal of Experiment 5 was to address this question more directly. In this study, we again employed an ease-of-retrieval manipulation to influence participants' perceptions of their ingroup. In contrast to Experiment 4, however, we additionally assessed the impact of this manipulation on participants' construal of their ingroup. These ingroup judgments were then used to determine if the obtained effects on outgroup judgments are indeed mediated by participants' construal of their ingroup, such that: (a) outgroups are judged lower with regard to a given trait the higher participants perceive their ingroup with regard to that trait, and (b) controlling for the effect of ingroup construal attenuates the obtained effects on outgroup judgments (cf. Baron & Kenny, 1986).

Method

Participants and design

A total of 70 students of the University of Western Ontario (47 female; 23 male) were asked to think up either 3 or 10 Western Ontario students (i.e., ingroup members) who are either high in introversion or high in extraversion. After completing the exemplar generation task, participants were asked to indicate how introverted/ extraverted they think Western Ontario students are in general. Immediately afterwards, participants were asked to judge the students of eight other Canadian universities (i.e., University of Waterloo, University of Toronto, University of British Columbia, McGill University, Simon Fraser University, Wilfrid Laurier University, York University, and Concordia University) with regard to introversion/extraversion. Ratings of introversion/extraversion were assessed with 7-point scales ranging from -3 (very introverted) to +3 (very extraverted). As a manipulation check, we additionally asked participants to indicate how difficult they experienced the generation of the requested number of Western Ontario students on a scale ranging from 1 (very easy) to 7 (very difficult). The experiment was run in a larger battery of multiple studies, lasting approximately 45 min. Subjects received credit toward experiment participation requirements.

Results and discussion

Manipulation checks

Supporting the effectiveness of the present manipulation, a 2 (number of ingroup exemplars) × 2 (trait dimension) ANOVA revealed that participants experienced the generation of 10 Western Ontario students as more difficult than the generation of 3 Western Ontario students $(M_{\rm S}=5.15 \text{ vs. } 3.78, \text{ respectively}), F(1,66)=11.12,$ $p=.001, \eta^2=.144$. There was also a theoretically less interesting main effect of trait dimension, indicating that participants experienced the generation of introverted Western Ontario students as more difficult than the generation of extraverted Western Ontario students $(M_{\rm S}=4.89 \text{ vs. } 4.00, \text{ respectively}), F(1,66)=4.62, p=.04,$ $\eta^2=.065$. There was no significant interaction between number of ingroup exemplars and trait dimension, $F(1,66)=.08, p=.77, \eta^2=.001$.

Ingroup judgments

A 2 (number of ingroup exemplars) × 2 (trait dimension) ANOVA on judgments of Western Ontario students revealed a significant two-way interaction, F(1,66) = 5.23, p = .03, $\eta^2 = .073$ (see Fig. 6). Consistent with previous demonstrations of the ease-of-retrieval effect, inspection of means indicated that participants rated Western Ontario students higher in extraversion when they generated 3 extraverted Western Ontario students (easy) than when they generated 10 extraverted Western Ontario students lower in extraversion when they generated three introverted Western Ontario students lower in extraversion when they generated three introverted Western Ontario students (easy) than when they generated 10 introverted Western Ontario students (easy) than when they generated 10 introverted Western Ontario students (easy) than when they generated 10 introverted Western Ontario students (easy) than when they generated 10 introverted Western Ontario students (difficult).



Fig. 6. Mean scores of judged extraversion of ingroup members as a function of trait type of generated ingroup exemplars (introverted vs. extraverted) and number of generated ingroup exemplars (3 vs. 10), Experiment 5.

Outgroup judgments

Judgments of students of other universities were averaged into a single index by calculating mean values (Cronbach's $\alpha = .78$). Submitted to a 2 (number of ingroup exemplars) $\times 2$ (trait dimension) ANOVA, this index revealed a significant two-way interaction of trait dimension and number of exemplars, F(1,66) = 4.24, $p = .04, \eta^2 = .060$ (see Fig. 7). Replicating the interaction pattern obtained in Experiment 4, participants judged students of other universities as more extraverted when they had to generate a low number of introverted Western Ontario students (easy) than when they had to generate a high number of introverted Western Ontario students (difficult). In contrast, participants judged students of other universities as less extraverted when they had to generate a low number of extraverted Western Ontario students (easy) than when they had to generate



Fig. 7. Mean scores of judged extraversion of outgroup members as a function of trait type of generated ingroup exemplars (introverted vs. extraverted) and number of generated ingroup exemplars (3 vs. 10), Experiment 5.

a high number of extraverted Western Ontario students (difficult).

In order to test whether the obtained effects on outgroup judgments were indeed mediated by participants' construal of their ingroup, we conducted an analysis of covariance (ANCOVA) with number of ingroup members and trait dimension as fixed factors, ingroup judgments as covariate, and outgroup judgments as dependent measure. Consistent with our predictions, this analysis revealed a highly significant effect of the covariate, F(1,66) = 16.47, p < .001, $\eta^2 = .202$. Specifically, students of other universities were judged as less extraverted the more extraverted participants judged Western Ontario students (r = -.48, p < .001). The interaction effect of number of ingroup exemplars and trait dimension on outgroup judgments, however, failed to reach statistical significance after controlling for ingroup judgments, F(1,66) = 1.21, p = .27, $\eta^2 = .018$. A Sobel test indicated a significant mediation effect of ingroup judgments, z = 1.99, p < .05. Taken together, these results corroborate our assumptions: (a) that participants employ a momentary construal of their ingroup as a standard of comparison for their judgments about outgroups, and (b) that outgroups are contrasted from this momentary construal of the ingroup.

General discussion

The main goal of the present research was to investigate the role of ingroup construals in judgments about outgroups. Specifically, we proposed: (a) that people habitually use a construal of their ingroup as a standard of comparison for judgments about outgroups, and (b) that perceivers differentiate between outgroups and their ingroup, thus leading to contrast effects with respect to ingroup construal and outgroup judgments (see Fig. 1). More precisely, we argue that outgroup-related inferential goals (Step 1) elicit a judgment about the ingroup (Step 2). Outgroups are then accentuated from this construal of the ingroup (Step 3), which in turn leads to a contrast effect on outgroup judgments (Step 4).

Results from five studies offer converging evidence for these assumptions. Experiments 1 and 2 manipulated outgroup-related inferential goals (Step 1) and then assessed the activation level of relevant ingroup knowledge (Step 2). Consistent with the assumption that participants habitually activate their ingroup in the course of making judgments about outgroups, participants in Experiment 1 showed faster responses to ingroup-related words in a lexical decision task when they judged a corresponding outgroup before than when they judged a non-corresponding outgroup before. These results were corroborated in Experiment 2, showing that participants were faster in judging their ingroup when they had judged a corresponding outgroup before than when they

had judged a non-corresponding outgroup before. Drawing on these findings, Experiments 3 and 4 further demonstrated that situationally induced changes in the momentary construal of an ingroup (Step 2) influence corresponding judgments about outgroups (Step 4), and that such changes in ingroup perceptions influence outgroup judgments in a contrastive manner (Step 3). Specifically, participants in Experiment 3 exhibited a higher level of prejudice against a corresponding outgroup when they saw a positive ingroup member than when they saw a negative ingroup member. This effect of momentary ingroup construals was conceptually replicated in Experiment 4 employing an ease-of-retrieval manipulation (cf. Schwarz et al., 1991). In this study, participants judged outgroups higher with respect to a given trait when they had to generate a high number of ingroup exemplars with that trait (difficult = low trait level for ingroup) than when they had to generate a low number of relevant ingroup exemplars (easy = high trait level for ingroup). Finally, Experiment 5 demonstrated that the obtained effects on outgroup judgments are indeed mediated by participants' momentary construal of their ingroup (Step 2), such that: (a) outgroups were judged lower with regard to a given trait the higher participants perceived their ingroup with regard to that trait, and (b) controlling for the effect of ingroup construal attenuated the obtained effects on outgroup judgments.

The present studies extend previous evidence for selfreferential comparisons in social judgment. A number of experiments have shown that people habitually use selfknowledge as a standard of comparison for judgments about other individuals (e.g., Dunning & Hayes, 1996; Holyoak & Gordon, 1983; Karylowski, 1990; Srull & Gaelik, 1983). The present findings indicate that the predominance of such self-referential comparisons also holds at the group level, such that people habitually base their judgments about outgroups on a spontaneous comparison to their ingroup. However, an open question related to this point is whether such comparisons to the ingroup play a privileged role in judgments about outgroups. Specifically, one could argue that even though the ingroup may habitually be employed as a standard of comparison, judgments about a given outgroup could also be influenced by comparisons to other outgroups that are similar to this outgroup. With regard to judgments at the individual level, for example, Karylowski, Konarzewski, and Motes (2000) recently demonstrated that self-referential comparison is only one of several comparison processes involved in judgments about other individuals. Notwithstanding these findings, however, it is important to note that ingroup comparisons may still play a pervasive role in outgroup judgments. For instance, US Americans may use Americans and the French as a standard of comparison when making judgments about Germans, and they may use Americans and Saudi Arabians when making judgments about Iraqis. In other words, even though judgments about outgroups may be influenced by comparisons to various (different) outgroups, outgroup judgments may always be influenced by comparisons to the (same) ingroup. Future research comparing the role of different comparison standards in outgroup judgments may help to clarify the predominant role of ingroup related comparisons.

An open question is whether the obtained effects of ingroup comparisons are more pronounced for stereotypical or non-stereotypical trait dimensions. With regard to stereotypical trait dimensions, for example, one could argue that such traits may be more likely to elicit the proposed contrasting between outgroups and the ingroup. As such, the obtained effects may be more pronounced for stereotypical as compared to non-stereotypical traits. On the other hand, however, one could also argue that judgments in stereotypical trait dimensions may be directly retrieved from memory without requiring any kind of social comparison process. If so, then the obtained effects may be more pronounced for non-stereotypical as compared to stereotypical trait dimensions. Future research may help to clarify the role of trait stereotypicality for the role of ingroup construals in judgments about outgroups.

Another interesting question for future research is whether the obtained effects of ingroup exemplars on outgroup evaluations are limited to explicit judgments, or whether similar effects can be obtained on implicit attitude measures (e.g., Fazio, Jackson, Dunton, & Williams, 1995; Greenwald, McGhee, & Schwartz, 1998; Wittenbrink, Judd, & Park, 1997). Dasgupta and Greenwald (2001), for example, found that that mere exposure to pictures of admired Black or disliked White individuals can change Caucasian participants' automatic evaluations of African Americans. In a similar vein, Lowery, Hardin, and Sinclair (2001) found that mere interaction with a Black experimenter (as compared to a White experimenter) is capable to reduce automatic negative evaluations of African Americans. In contrast to the present studies, however, these experiments did not explicitly test the differential effects of ingroup and outgroup exemplars. In Dasgupta and Greenwald's (2001) studies, for example, participants received either pictures of admired Blacks and disliked Whites or pictures of disliked Blacks and admired Whites, thus confounding valence and group membership. Accordingly, it is not clear whether the obtained effects stem from the exposure to positive vs. negative ingroup exemplars or from the exposure to positive vs. negative outgroup exemplars (or perhaps both). In a similar vein, Lowery et al. (2001) did not manipulate the valence of Black and White experimenter's behavior. Hence it is possible that Lowery et al.'s results do not stem from mere interaction with an outgroup member in contrast to an ingroup member, but from the (presumably) positive behavior exhibited

by these individuals. If the experimenters had behaved unfriendly, mere interaction with a Black experimenter in contrast to a White experimenter might have been insufficient to reduce the automatic activation of negative attitudes toward African Americans. In contrast, negative behavior by a Black experimenter could have reinforced automatic negative evaluations whereas negative behavior by a White experimenter could have reduced automatic negative evaluations. Future research may further investigate the effects ingroup exemplars on implicit outgroup evaluations.

In sum, the present findings suggest that differing perceptions of an ingroup can have important consequences for judgments about outgroups. Specifically, it seems: (a) that perceivers habitually use a momentary construal of their ingroup as a standard of comparison for outgroup judgments, and (b) that perceivers generally accentuate the differences between outgroups and their ingroup, thus leading to contrast effects between ingroup construal and outgroup judgments. In other words, judgments about one and the same outgroup can be context depend when this context is able to shift people's construal of their ingroup.

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