Attributions and Stereotype Moderation

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Two experiments were conducted to investigate the relationship between attributions made for stereotype-relevant behaviours and stereotype-based beliefs. In Experiment 1 participants were presented with a scenario describing an individual from a target group performing a stereotype-consistent behaviour. After reading the scenario, participants completed attributional ratings for the behaviour and rated the target group on stereotype-relevant characteristics. In Experiment 2, participants read a scenario that described an individual performing either a stereotype-consistent or a stereotype-inconsistent behaviour. After reading the scenario, participants completed a sentence stem, which was subsequently coded for the presence of situational or dispositional attributions for the target behaviour. Participants also rated the target group on stereotype-based dimensions. In both experiments participants who made atypical attributions for the target behaviours (situational attributions for stereotype-consistent and dispositional attributions for -inconsistent behaviours) made less stereotype-based judgments of the target group than participants who made typical attributions (dispositional attributions for stereotype-consistent and situational attributions for -inconsistent behaviours). Results are discussed in terms of moderation of stereotypes.

Social perceivers have a tendency to offer dispositional attributions for the behaviours of others. This tendency is known as the correspondence bias (Gilbert, Pelham, & Krull, 1988; Jones & Harris, 1967) or fundamental attribution error (Ross, 1977). Despite its pervasiveness, however, the correspondence bias does not inevitably drive attributions about the behaviours of others. When perceivers are motivated to consider the influence of the situation, the correspondence bias can be reduced, eliminated, or even reversed (Krull, 1993). Overcoming, or correcting, one's initial judgment, based on a correspondent inference, is, however, effortful and involves causal reasoning (Gilbert et al., 1988; Gilbert, 1991) and the suppression, or over-riding, of already formed dispositional inferences (Yzerbyt, Corneille, Dumont, & Hahn, 2001). Perceivers must, therefore, be motivated to overcome their spontaneous dispositional inferences (Uleman, 1999) in order to devote the required cognitive resources.

Maintenance of stereotypic beliefs may be one such condition under which perceivers are prepared to devote the necessary cognitive resources, attributing counter-stereotypic behaviours to situational causes (Bodenhausen & Wyer, 1985; Duncan, 1976; Evett, Devine, Hirt, & Price, 1994; Macrae & Shepherd, 1989), in order to sustain their pre-existing stereotype-based beliefs (Yzerbyt, Coull, & Rocher, 1999). Dispositional attributions imply greater stability of behaviours across time and context than do situational attributions. Accordingly, if a behaviours is attributed to dispositional qualities the implications for beliefs about the target individual who performed the behaviours, and also the group of which they are a member, are greater. Situational attributions reduce the generalizability of behaviours across time and place and hence may weaken the extent to which perceivers need to moderate their beliefs about the target or the target group in response to counter-stereotypic information. Indeed, moderation of stereotype-based beliefs in response to the presentation of stereotype-inconsistent information is only seen if dispositional attributions are made for the inconsistent behaviours (Hewstone, 1989; Johnston, Bristow & Love, 2000; Wilder, Simon, & Faith, 1996).[1] Attribution of the same behaviours to situational causes does not lead to moderation of stereotype based beliefs (Hewstone, 1989; Wilder et al., 1996).

Whilst most research attention has been paid to attributions for, and the impact on stereotype-based beliefs of, counter-stereotypic information, Johnston et al. (2000; Experiment 1) demonstrated that the attributions made for stereotype-consistent behaviours can similarly influence the strength of stereotype-based beliefs. They showed that moderation of stereotype-based beliefs, relative to baseline, occurred when stereotype-consistent behaviours were attributed to situational causes.

Attribution of the same behaviours to dispositional causes did not lead to any moderation of group-based beliefs. This effect was seen when the experimenters provided individuals with a situational attribution for the target stereotypic behaviours and also amongst those individuals who spontaneously offered an atypical attribution for the stereotypic behaviours (Johnston et al., 2000). Although the number of participants who spontaneously made this atypical attribution for stereotypic behaviours – attributing the behaviours more strongly to situational than to dispositional factors – was small, this may be a fruitful avenue for investigating possible means by which to moderate stereotype-based judgments. Accordingly, the present research further investigates the relationship between attributions for stereotype-relevant behaviours and stereotype-based beliefs about the stereotyped target group.

Both reported experiments considered the issue of the spontaneity of making atypical attributions for the target behaviours. In the first experiment we investigated whether contextual information could be used to increase the likelihood of individuals offering situational attributions for a stereotypic behaviours, without the experimenter actually providing participants with such an attribution (Johnston et al., 2000 Experiment 1; Wilder et al., 1996). In the second experiment we used a sentence stem completion task (Hastie, 1984), as an indirect measure of the attributions made by participants. We predicted, in each experiment, that those who made an atypical attribution for a target behaviours would show moderation of stereotype-based judgments, relative to baseline participants, whilst those who made a typical attribution for the behaviours would show no difference in stereotype-based judgments from baseline participants.

Experiment 1

Previous research has demonstrated that those who made a situational attribution for a stereotypic behaviour also made fewer stereotype-based judgments of the target group. However, when not provided with an attribution for the target behaviour by the experimenter, the proportion of participants who spontaneously offered such an atypical attribution was low (Johnston et al., 2000). In this experiment we investigated whether participants could be led to make an atypical attribution. Instead of the experimenter providing an attribution for the target behaviour, some participants in the present experiment were furnished with additional, contextual information about the target stereotypic behaviour that would suggest a situational attribution. Specifically, these participants were told that the target behaviour was also displayed by a large majority of others in the same situation. Such information should reduce the likelihood that the target behaviour is seen as the result of dispositional factors, and increase the likelihood of a situational attribution being made. We were interested in whether this additional information did indeed lead participants to make a situational attribution and if it also led to their making less stereotype-based judgments of the target group as a whole.

Method

Participants. Twenty-seven (14 female; 13 male) university students volunteered to participate in return for entry into a prize draw. An additional 30 (21 female; 9 male) students provided baseline data.[2] The experiment was, therefore a single factor (condition: additional information/no additional information/ baseline) between-subjects design.

Materials. Participants completed a short experimental booklet in which they were presented with a brief scenario, describing the behaviour of an individual from the target group (women). There were two versions of the scenario, each describing stereotypic behaviour of the women – performing well (achieving an A grade) in a childcare course. The domain of childcare is a stereotypically female domain and pilot studies demonstrated that performing well in this domain was indeed seen as a stereotypical female behaviour and was attributed to dispositional causes. In one version of the scenario, there was an additional sentence that provided context for the target's behaviour: "Fifty-seven of the 60 students in the course got an A grade". This additional information was aimed at pushing participants toward making a situational attribution (e.g., the course was easy) rather than a dispositional attribution for the performance of the target individual. After reading the scenario participants were asked to rate, on separate scales, the extent to which the behaviour of the target individual was due to dispositional and to situational causes (1 – 'not at all'; 7 – 'extremely'). After completing the attribution ratings, participants were then asked to rate how characteristic a number of traits were of the target group (1 – 'not at all'; 7 – 'extremely'). The critical counter-stereotypic traits (assertive, confident; Johnston et al., 2000) were embedded amongst filler traits (e.g., witty; kind). As there were no effects of the experimental manipulations on ratings of the filler traits, these are not discussed further. Baseline participants did not read an experimental scenario but completed only the trait-rating task, in order to provide data regarding perceptions of women on the critical traits that could not have been influenced by the experimental information presented.

Procedure. Participants were recruited individually. They were asked to work through the experimental booklet from beginning to end without turning back or referring to their responses to previous questions. It was stressed that there were no correct or incorrect responses to any of the questions and that anonymity of responses was assured. After completion of the questionnaire participants were debriefed and thanked.

Results and Discussion

Attributions. A 2 (condition: no additional information/additional information) x 2 (attributions: dispositional/situational) ANOVA with repeated measures on the second factor was conducted on the attribution ratings. This revealed only a significant interaction effect, $F(1,25)=42.55$, $p<.0001$. As expected, in the no additional information condition the stereotypic behaviours was attributed more strongly to dispositional than to situational causes (Tukey, $p < .05$; Ms = 5.77 vs. 3.88), consistent with previous research that has demonstrated a tendency to attribute stereotypic behaviours to dispositional factors (Bodenhausen & Wyer, 1985; Duncan, 1976; Evett et al, 1994; Macrae & Shepherd, 1989). When additional

information was provided about the high performance of other members of the class, however, the behaviours was attributed more strongly to situational than dispositional factors (Tukey, $p < .05$; *M*s = 5.50 vs. 3.50). As intended then, the addition of contextual information encouraged participants to offer situational attributions for a stereotypic behaviour.

The participants were classified, as in Johnston et al. (2000), as having made a typical attribution (i.e., higher dispositional than situational ratings) or an atypical attribution (i.e., higher situational than dispositional ratings) for the target behaviour. In the no additional information condition all 11 participants made typical attributions; in the additional information condition, 5 made typical attributions and 9 made atypical attributions.

Stereotype-based judgments. The correlation between ratings of assertiveness and confidence was high ($r(56)=.502, p<.0001$), and so a mean rating of the stereotype-inconsistent traits was created for each participant. Note that scores were reversed so that higher ratings indicate more stereotype-based judgments (i.e., less assertive and less confident). A one-way ANOVA (condition: no additional information/ additional information/baseline) on the mean ratings revealed a significant effect, $F(2,53)=3.69$, $p<.05$. Post-hoc tests (Tukey, $p<.05$) showed ratings in the additional information condition to be significantly lower than baseline ratings (*M*s = 3.71 vs. 4.40) but there was no difference between baseline and the no additional information condition (*M*s = 4.40 vs. 4.21). As all participants in the no information condition made typical attributions for the target behaviours, it was not possible to compute the ideal 2 (condition: no additional information/additional information) x 2 (attribution: typical/ atypical) between-subjects ANOVA with a hanging control condition. Instead, a single factor (attributions: typical/atypical/baseline) between-subjects ANOVA was conducted which revealed a marginally significant effect, $F(2,53)=2.61$, $p<.08$. Lower ratings were made by those who made atypical attributions for the target behaviours than by those who gave typical attributions and by baseline participants (*M*s = 3.78, 4.03 and 4.40).

The results from Experiment 1 support our predictions, and previous research (Johnston et al., 2000), in that individuals who made an atypical attribution for a stereotypic behaviour were less stereotypic in their evaluations of the target group of which the exemplar displaying the target behaviour was a member. The attributional ratings made by those in the no information condition showed that a stereotypic behaviour is normally attributed to dispositional causes (Bodenhausen & Wyer, 1985; Duncan, 1976; Evett et al., 1994; Macrae & Shepherd, 1989), with no participants in this condition making an atypical attribution for the target behaviour. However, the inclusion of additional information that suggested a situational cause for the behaviorsof the target individual, in this case with regards to performance of others on the same task, did influence the attributions made by participants in that condition. Overall, the ratings of situational causes were higher than those of dispositional causes and the majority of participants (64%) in this condition made atypical attributions for the target behaviour (i.e., higher ratings for situational than dispositional causes). Further, those individuals who made an atypical attribution for the target behaviours had lower stereotype-based trait ratings than did the baseline participants. Indeed, the trait-rating data suggest that simply being provided with the contextual information indicating a situational explanation for the stereotypic behaviour may be sufficient to lead participants to make less stereotype-based judgments of the target group.

Experiment 2

In this experiment we used a less direct measure of attributions to investigate the association between attributions for stereotype-relevant behaviours and stereotype-based judgments. Previous studies have had participants rate the extent to which the target behaviours was due to dispositional and to situational causes on separate rating scales. Completion of such ratings forces participants to consider possible causes for an event and to consider both situational and dispositional causes. Whether they would spontaneously consider the influence of both types of factor without making such explicit ratings is, however, unclear. By using a word stem completion task (Hastie, 1984) following the presentation of the target behaviours, we provide participants with the opportunity to make attributions for that behaviour but without there being any necessity for them to do so. Participants can complete the sentence stem in whatever way they wish. The sentence completions were later coded for the presence and nature of attributions made for the target behaviour. Similarly we do not provide any guidance regarding types of possible causes – situational or dispositional – for them to consider. Accordingly, participants are neither forced to complete the sentence in a causal manner, nor to consider situational and dispositional influences on the target behaviour.

Method

Participants. Ninety six university (48 female, 48 male) students volunteered to participate in return for payment of $2. An additional 30 students (15 male, 15 female) provided baseline data. Participants in this experiment had not participated in Experiment 1. The experiment was a single factor (scenario: stereotype-consistent/-inconsistent/baseline) between-subjects design.

Materials. Participants completed a short experimental booklet in which they were presented with a brief scenario, taken from Johnston et al. (2000), describing the behaviour of an individual from the target group (women). There were two versions of the scenario, one stereotype-consistent and one stereotype-inconsistent. The scenarios described the aggressive (stereotype-inconsistent) or passive (stereotype-consistent) behaviour of a woman when a man pushed in front of her in the queue for an automatic teller machine. Pilot studies showed that these behaviours were indeed seen as counter-stereotypic and stereotypic of women respectively and that the stereotype-consistent version was rated as being due more to dispositional than to situational causes and the stereotype-

inconsistent version as being due more to situational than to dispositional causes. After reading the scenario participants were given the beginning of a sentence ("*target name* behaved in this way…") and asked to complete that sentence in whatever way they choose (Hastie, 1984). After completing the sentence, participants were then asked to rate how characteristic a number of traits were of the target group. The critical traits (aggressive, assertive) were embedded amongst filler, non-stereotypic, traits (e.g., witty; kind). As there were no effects of the experimental manipulations on ratings of the filler traits, these are not discussed further. Baseline participants completed only the trait ratings.

Procedure. Participants were recruited individually. They were asked to work through the question booklet without turning back. It was stressed that there were no correct or incorrect responses to any of the questions and that anonymity of responses was assured. After completion of the questionnaire participants were debriefed, thanked and paid.

Results and Discussion

Attributions. Each sentence completion was coded by two independent coders, with any differences (<10%) resolved through discussion. Only 7 participants (7.29%) did not offer an explanation for the target behaviours and these participants were omitted from subsequent analyses. Where an attribution was offered for the target's behaviour it was coded as either a dispositional or a situational attribution. Participants were then categorized, as in Experiment 1, as having made either a typical attribution (a dispositional attribution for the consistent behaviour or a situational attribution for the inconsistent behaviour) or an atypical (a situational attribution for the consistent behaviour sor a dispositional attribution for the inconsistent behaviour). A minority of participants (38%) made an atypical attribution for the target behaviour, with atypical attributions being more frequent for the stereotype-consistent than for the -inconsistent behaviour (45% versus 29%), consistent with Johnston et al. (2000).

Stereotype-based judgments. A mean score was calculated for the critical traits for each participant. Ratings were again reversed so that a higher score indicated a more stereotype-based judgment. A 2 (scenario: consistent/ inconsistent) x 2 (attributions: typical/ atypical) between-subjects ANOVA with a hanging control condition[3] revealed only a significant main effect of attributions, $F(1,114)=9.54$, $p<.01$. Those who made an atypical attribution for the target behaviour made less stereotype-based judgments of the target group than did those who offered a typical attribution (Ms = 3.47 vs. 4.12; $p<.05$). Further, comparisons with the baseline ratings (M = 3.98) showed those making atypical attributions were less stereotypic than the baseline group, whilst those making typical attributions did not different from the baseline participants.

Overall, the results of Experiment 2 supported our hypotheses. Those who made an atypical attribution for a stereotype-relevant behaviour (either stereotype-consistent or –inconsistent) showed moderation of their stereotype-based judgments relative to baseline participants, whilst those who made a typical attribution showed no difference from baseline. Using a different, and arguably more generalisable, measure of attributions, these findings support those seen in Experiment 1 and in previous research (Johnston et al., 2000).

General Discussion.

The present research aimed to further investigate the relationship between attributions made for stereotype-relevant behaviours and stereotype-based judgments of the target group (Hewstone, 1989; Johnston et al., 2000; Wilder et al., 1996). In both of the reported experiments, we demonstrated that those who offered atypical attributions – for either stereotype-consistent or stereotype–inconsistent behaviours – were indeed less stereotypic in their judgments of the target group, as in past research (Johnston et al., 2000; Wilder et al., 1996).

In Experiment 1 no participants in the no additional information condition spontaneously offered an atypical attribution for the stereotypic behaviour. When additional evidence pointing against a dispositional attribution for the behaviour was provided, however, the majority of participants did offer a situational (atypical) attribution for the target behaviours. Perceivers can, then, be encouraged to make atypical attributions for stereotypic behaviours, without the experimenter explicitly providing such an attribution (Wilder et al., 1996). Further, those who offered an atypical attribution for the behaviour did tend to make fewer stereotype-based judgments of the target group. It is interesting to note, however, that a third of our participants in this condition still offered an internal attribution for the stereotypic behaviour, even with information that pointed against such an explanation. The tendency to make internal, dispositional attributions for stereotypic behaviours is indeed a strong one (Bodenhausen & Wyer, 1985; Duncan, 1976; Evett et al., 1994; Macrae & Shepherd, 1989).

In Experiment 2, as in Johnston et al. (2000), some participants did offer an atypical attribution for the target behaviours and, again like Johnston et al. (2000), this was relatively more prevalent for the stereotype-consistent than for stereotype–inconsistent behaviours. This pattern of findings is positive as it was shown using a less direct measure of attributions than the rating scales typically employed. The sentence stem completion task (Hastie, 1984), did not necessitate any causal reasoning by participants, nor any consideration of the impact of either dispositional or situational factors on the target behaviours. That some participants did still offer atypical attributions for the stereotype-relevant behaviour and that they also showed less endorsement of stereotype-based beliefs on the trait ratings of the target group, is encouraging for attempts to moderate stereotype beliefs.

The extent to which judgments of the target group were stereotype-based was assessed by ratings on counter-stereotypic characteristics only, since previous research has shown that the "action" in moderation of stereotype-based beliefs comes on measures of counter-stereotypic rather than stereotypic traits (Johnston & Hewstone, 1992; Locke, MacLeod & Walker, 1999), but it is possible

that these lower ratings on counter-stereotypic dimensions could be compensated by higher ratings on stereotypic traits which, although unlikely (Johnston & Hewstone, 1992; Locke et al., 1999), should be monitored in future studies.

In conclusion, we suggest that the results of the present research provide a potentially fruitful avenue for the moderation of stereotypical beliefs. Attending to, and intervening in, the explanations perceivers offer for stereotype-consistent behavior offers an alternative to attempts to influence the attributions made for stereotype-inconsistent behavior (Hewstone, 1989; Johnston et al., 2000; Wilder et al., 1996). As demonstrated in Experiment 1, the presentation of contextual information led social perceivers to make non-stereotypical attributions for stereotypical behaviours, and to moderate their stereotypical beliefs, relative to baseline participants. Furthermore, Experiment 2 demonstrated that even without such contextual information, some individuals spontaneously displayed this pattern of attribution when explaining the behaviours of others. Importantly, these individuals also displayed more moderate stereotypical beliefs than individuals who offered more typical attributions. Together, these findings suggest that the active consideration of contextual information may lead to more moderate stereotypic beliefs. Identification of the characteristics of those who spontaneously offer this atypical pattern of attribution, as well as conditions under which the presentation of contextual information may have most influence on the moderation of stereotypes, both await further investigation.

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Notes

[1] The perceived typicality of the group exemplar displaying stereotype-inconsistent information is also an important moderator of the impact of that information, but was not considered in the reported research.

[2] There was no effect of sex of participants in either of the reported experiments and so this factor is not considered further.

[3] Participants in the control condition simply completed the target rating task, they were not presented with a scenario describing a target's behaviour and they did not provide attributions for the target behavior. Accordingly, there would be empty cells in a fully factorial ANOVA – 3 (scenario: consistent/inconsistent/baseline) x 2 (attributions: typical/atypical). A 2 (scenario: consistent/inconsistent) x 2 (attributions: typical/atypical) factorial ANOVA would test for differences between experimental conditions but does not include a comparison with the baseline ratings which is essential in order to make any claims about the direction (increase/decrease) of changes in ratings as a function of attributions made. Analysis using a single control condition attached to a factorial design does allow for such comparisons and can be computed within most standard computer-based statistical analysis packages.

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