

Reducing Prejudice Through Priming of Control-Related Words

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Abstract. We investigated the effect of incidentally presented constructs that imply self-control on activated stereotypes associated with immigrants. To activate immigrant stereotypes, participants responded to a scale that measures people's prejudice toward immigrants. They were then primed, using scrambled sentences, with words that were related to self-control (e.g., control, restrain, self-regulate) or with neutral words. After the priming task, participants evaluated an ambiguous behavior of a target person. On the basis of three experiments, the results showed that participants primed with the control-related words rated the target behavior more positively than those primed with neutral words. The results are discussed in relation to previous research on self-control, automatic influence of activated constructs, and prejudice reduction.

Key words: stereotypes, prejudice reduction, self-control, incidental activation

Introduction

A white European, or a European-American, seeing a lonesome woman being approached by a young white man in a quiet and depopulated park is likely to infer that he might be her boyfriend who is coming late to a prearranged meeting. The inference may, however, dramatically change if an African-American man instead approached the girl. The white European(-American) perceiver is likely to activate the stereotypes associated with African Americans (e.g., hostility; see Devine, 1989) that may then bias his/her appraisal and judgment of the event. Thus, rather than thinking that this could be a cordial meeting between a man and a woman, the perceiver might infer that the woman might be in danger of being harassed.

One of the common findings of intergroup perception research is that people make their initial impression of others on the basis of salient physical features (e.g., Fiske & Taylor, 1991) and social group membership (e.g., Allport, 1954; Fiske & Neuberg, 1990). An important component of these judgmental

processes is stereotyping, whereby previously held beliefs about a social category are used in forming an impression of an individual member of that category. Recent research has thus characterized stereotypes as resource-saving devices to emphasize their functional utility and efficiency-enhancing property (Gilbert & Hixon, 1991; Macrae, Stangor, & Milne, 1994). More important, an impressive body of research has clearly established that stereotypes, as well-learned sets of associations, can be activated spontaneously or automatically in the presence of a stimulus cue in the environment (e.g., Banaji & Greenwald, 1995; Banaji, Hardin, & Rothman, 1993; Devine, 1989; Fazio, Jackson, Dunton, & Williams, 1995; Perdue & Gurtman, 1990). These findings suggest that stereotype activation might be uncontrollable (e.g., Bargh, 1999; Devine, 1989).

Given that stereotypes often lead to biased information processing and negative evaluation of stigmatized groups (for reviews, see Fiske, 1998; Hilton & von Hippel, 1996), can the impact of activated stereotypes on subsequent judgments be diminished or eliminated? Several research findings indicate that activated stereotypes may not be applied to subsequent judgments. Factors such as accuracy motivation (e.g., Sedikides, 1990), outcome dependency (Neuberg, 1989), accountability (Tetlock & Kim, 1987), and processing goals (for a review, see Devine & Monteith, 1999) can attenuate the impact of

This research was supported by Grant 2000–0282 to Bo Ekehammar from the Bank of Sweden Tercentenary Foundation. We would like to thank two anonymous reviewers for their valuable comments on the first draft of the present paper.

DOI: 10.1027//1618-3169.49.3.222

Experimental Psychology 2002; Vol. 49(3): 222–227

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activated stereotypes on subsequent task performance. However, an important question that previous research has not yet fully addressed is whether contextual cues that are related to self-control can diminish the impact of activated stereotypes on subsequent judgments.

According to the automotive model of Bargh (1990), intentions and behavioral goals (for example, an intention not to engage in stereotyping) can be represented in memory like any other knowledge structures, such as stereotypes. An important insight from this model is that intentions and goals, as mental representations, can be automatically activated in the presence of a triggering cue and then operate unconsciously, thus influencing subsequent judgments and behavior. A number of studies support this contention (e.g., Bargh, Chen, & Burrows, 1996; Chartrand & Bargh, 1996; Dijksterhuis & van Knippenberg, 1998; Macrae, Bodenhausen, & Milne, 1998). Macrae et al. (1998, Study 4), for example, investigated whether perceivers can implement self-regulatory processes and inhibit stereotypic responses without any awareness of the stimulus that instigate these processes. Participants were subliminally primed with either their own surnames (i.e., high-self-focus condition) or with the surnames of other people (low-self-focus condition). Their results showed that participants in the high-self-focus condition displayed less stereotypical conceptions of a target person than those in the low-self-focus condition. This outcome implies that self-regulatory mechanisms can be activated automatically in the presence of a contextual cue.

Of interest to the present study is, therefore, whether other cues than self-focus can suppress the expression of activated stereotypes. Thus, in the present study, we examine whether surreptitiously primed words that are related to control or self-regulation can diminish the impact of activated stereotypes on participants' judgments of a target person.

To this end, we first activated stereotypes associated with immigrants (e.g., hostile, unfriendly, unreliable; see Akrami, Ekehammar, & Araya, 2001) by letting participants answer the Modern Racial Prejudice Scale (MRPS; Akrami, Ekehammar, & Araya, 2000) that measures prejudice toward immigrants. Participants were then primed with either control-related or neutral words using a scrambled-sentence task (e.g., Srull & Wyer, 1979). Thus, participants in the control-related-words condition (the experimental group) unscrambled sentences containing words that were related to self-control, whereas the other half (the control group) unscrambled sentences containing neutral words. Participants were then asked to read a story and form an impression of the target person, known as the Donald paragraph (Srull & Wyer, 1979), who displays various ambiguous beha-

viors. This paragraph is a widely used method for assessing automatic stereotype activation and prejudice (e.g., Devine, 1989).

Experiment 1

Method

Participants and Design

Forty-six voluntary students from various departments of Uppsala University (18 men and 28 women), with a mean age of 28 years, participated in the experiment. A between-subjects (control-related vs. neutral prime condition) design was employed.

Stimulus Materials

The priming procedure involved a 12-item scrambled-sentence task (Chartrand & Bargh, 1996, Study 1; Srull & Wyer, 1979), and was presented to participants as a test of language ability from the Department of Linguistics at Uppsala University. Two variants of this task were constructed – one for each condition (control-related words, neutral words). The critical priming stimuli included words related to control and self-control, such as *regulate*, *control*, *self-control*, *restrain*, *self-regulate*, *examine*, and *check*. The neutral prime condition included neutral words, such as *elephant*, *weather*, and *computer*. Four sentences (two at the beginning and two at the end) were used as buffers. Each sentence consisted of four to six words (e.g., *controlled his book anger he* for the control-related-words condition, or *today's nice apple is weather* for the neutral-words condition) and participants were instructed to construct a grammatically correct four- or five-word sentence as quickly as possible.

Procedure

A male experimenter greeted each participant on arrival and randomly assigned him or her to one of the treatment conditions. There were 5 to 6 participants in each experimental session. To activate immigrant stereotypes, all participants completed the Modern Racial Prejudice Scale (Akrami et al., 2000) at the beginning of the experimental session. The scale includes items such as *There have been enough programs designed to create jobs for immigrants* and *Immigrants are getting too demanding in their push for equal rights*. The experimenter then informed

participants that they would be participating in two short and unrelated experiments testing language ability and prose comprehension. The priming procedure involved the 12-item scrambled-sentence task (see above). The experimenter admonished participants to first read the instruction very carefully and then proceed with the test. They were given 10 min to complete it. After having completed this task, they were given multi-digit multiplication problems to clear out working-memory effects. Participants had 4 min at their disposal to solve these problems. Following this task, participants were given the "prose comprehension test" which in reality was the impression formation task based on the Donald paragraph (Srull & Wyer, 1979). In the present experiment, the story was translated into Swedish. As we agreed with a previous critique (e.g., Lepore & Brown, 1997), the passage was softened by inserting a few positive elements. Participants were instructed to read the paragraph and rate the target person on 12 adjectives representing positive (*intelligent, interesting, considerate, reliable, sympathetic, kind*) and negative (*boring, hostile, unfriendly, dishonest, deceitful, narrow-minded*) characteristics. The ratings were made on a 10-point scale anchored by 1 (*do not agree at all*) and 10 (*agree completely*).

With the completion of this task, participants were asked if they thought that the language-ability test had influenced their impression of the target person or if they saw any connection between the two tasks. None of the participants had any suspicion or saw any connection between the tasks. Participants were debriefed, thanked, and dismissed.

Results

Based on the data from the impression formation task, a negativity index was formed by reversing the coding of the positive adjectives and taking the mean rating across all adjectives. After conducting an item analysis, one adjective (*interesting*) was excluded from this index to increase reliability. The internal-consistency reliability of the negativity index was satisfactory (Cronbach's $\alpha = .72$).

A between-subjects (control-related vs. neutral prime condition) ANOVA using the negativity index as dependent measure yielded a significant effect of treatment condition, $F(1, 44) = 6.37, p = .015$. The participants primed with the neutral words ($M = 6.84$) made a more negative impression of the target person than the participants primed with the control-related words ($M = 6.04$).

We analyzed the participants' MRPS scores to rule out the possibility that the obtained results could be due to initial differences in prejudice level be-

tween the groups. The results showed a nonsignificant difference between the groups, $F < 1$.

Because, in Experiment 1 there was no condition with no-stereotype activation, alternative explanations to the obtained result are possible. Therefore, we conducted a follow-up experiment in accord with Experiment 1 where, however, no immigrant stereotypes were activated (i.e., participants did not answer the immigrant prejudice scale at the beginning of the experimental session). Instead, participants directly unscrambled sentences containing words that were related to self-control whereas the other half (the control group) unscrambled sentences containing neutral words. In this case, using no-stereotype activation, we predicted that there would be no differences in negativity between the control-related words and neutral-words conditions.

Experiment 2

Method

Participants and Design

Fifty-two voluntary students from various departments of Uppsala University (22 men and 30 women), with a mean age of 25 years, participated in the experiment. A between-subjects (control-related vs. neutral prime condition) design was employed.

Stimulus Materials and Procedure

The stimuli and the procedure were the same as in Experiment 1. Unlike Experiment 1, however, participants did not complete the MRPS (Akrami et al., 2001) at the beginning of the experimental session. Thus, in Experiment 2, no immigrant stereotypes were activated initially.

Results

As in Experiment 1, a negativity index was formed by reversing the coding of the positive adjectives and taking the mean rating across all adjectives. After conducting an item analysis, one adjective (*interesting*) was excluded from this index to increase reliability. The internal-consistency reliability of the negativity index based on the remaining adjectives was satisfactory (Cronbach's $\alpha = .77$).

A between-subjects (control-related vs. neutral prime condition) ANOVA using the negativity index as dependent measure showed no significant effect

of treatment condition, $F(1, 50) = .26, p = ns$. Thus, when no immigrant stereotypes were activated, there were no differences between participants' judgments in the neutral ($M = 5.25$) and control-related conditions ($M = 5.43$).

Taken together, the results of Experiment 1 and 2 suggest that covertly primed words related to self-control can substantially decrease the expression of activated stereotypes on participants' evaluations or judgments of a target person. Further, when stereotypes were not activated (Experiment 2), there were no effects of control-related primes on the participants' evaluations of the target person.

However, a major flaw of Experiment 1 and 2 was that there was no strict random assignment of participants to the stereotype activation and no-stereotype activation conditions. Thus, no definite conclusion can be drawn from the two studies. Experiment 3 was designed to remedy this flaw.

Experiment 3

Method

Participants and design

Sixty-nine voluntary students from various departments of Stockholm University (31 men and 38 women), with a mean age of 23.4 years, participated in the experiment. A 2 (stereotype: activation vs. no activation) \times 2 (prime words: control-related vs. neutral) factorial design was employed.

Stimulus materials

The stimulus material used in the priming procedure was the same as in Experiment 1 and 2.

Procedure

A male experimenter greeted each participant on arrival and randomly assigned him or her to one of the treatment conditions. There were 5 to 6 participants in each experimental session. Unlike the participants in the no-stereotype-activation condition, those in the stereotype-activation condition were asked to complete the MRPS (Akrami et al., 2001) in the beginning of the experimental session. The rest of the procedure was the same as in Experiment 1 and 2.

Results

As previously, a negativity index was formed by reversing the coding of the positive adjectives and taking the mean rating across all adjectives. After conducting an item analysis, one adjective (*interesting*) was excluded from this index to increase reliability. The internal-consistency reliability of the negativity index based on the remaining adjectives was satisfactory (Cronbach's $\alpha = .73$).

A 2 (stereotype: activation vs. no activation) \times 2 (prime words: control-related vs. neutral) ANOVA using the negativity index as dependent measure yielded a significant main effect of stereotype activation, $F(1, 65) = 13.85, p = .000$, prime, $F(1, 65) = 9.82, p = .003$, and a significant Stereotype \times Prime words interaction $F(1, 65) = 4.75, p = .03$ (see Figure 1).

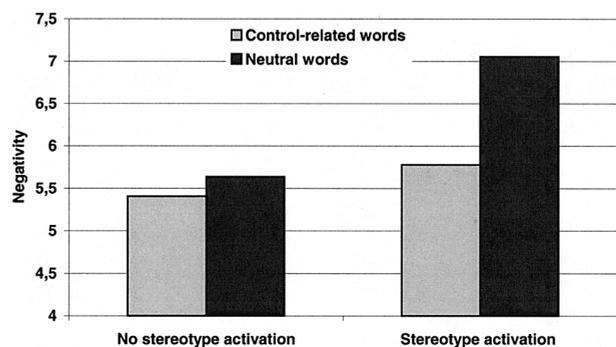


Figure 1. Mean negativity scores as a function of stereotype activation and prime words.

In the stereotype activation condition, a planned comparison revealed, as anticipated, a significant effect of the prime words, $F(1, 65) = 14.29, p = .000$. The participants primed with the neutral words ($M = 7.05$) made a more negative impression of the target person than those primed with the control-related words ($M = 5.78$). However, in the no-stereotype-activation condition, a simple effect analysis showed no significant effect of the prime words, $F(1, 65) = 0.45, ns$. Thus, participants primed with neutral words ($M = 5.64$) made similar judgments as those primed with control-related words ($M = 5.41$).

As in Experiment 1, we analyzed the participants' MRPS scores to rule out the possibility that the obtained results in the stereotype-activation condition could be due to initial differences in prejudice level between the groups. The result showed a nonsignificant difference between the groups, $F < 1$.

Further analyses were carried out to examine whether the participants' specific attitudes, expressed on the MRPS scale, predict the impact of control-related primes on the evaluation of the target person. This was made to examine whether the con-

trol-related primes affect only those who are positive in their attitudes; that is, scored low on the prejudice scale. A one-way ANCOVA with the prejudice score as a covariate revealed that participants primed with control-related words evaluated the target person less negatively than those primed with neutral words, also when taking their racial prejudice scores into account, $F(1, 32) = 31.34, p = .000$. Moreover, correlational analyses revealed no significant relationship between participants' scores on the prejudice scale and their negativity scores, $r = -.28$ (ns) for participants primed with control-related words as well as neutral words. Thus, the control-related primes seem to affect high- and low-prejudice people in the same way.

Discussion

Although, for some people, the tendency to stereotype others might be difficult to control, other people may successfully overcome this tendency by implementing self-regulatory processes (Devine, 1989; Macrae et al., 1998). Previous research has shown that direct or indirect cues that prohibit stereotyping others, or an explicit instruction that admonish perceivers to make an accurate impression of a target stimulus, can lead to less prejudiced evaluation of stigmatized group members (e.g., Devine & Monteith, 1999; Sedikides, 1990). When the triggering cue that initiates the self-regulatory process is experienced repeatedly, the process can be activated with relative ease in similar situations (Bargh, 1990). Thus, through repeated practice, an intention, such as not to engage in stereotyping, can be automatically activated in the presence of a relevant contextual cue. Bargh's (1990) automotive model makes precisely such a prediction.

Based on the automotive model, in the present study, we investigated whether an incidental activation of words related to control and self-control can lessen the influence of previously activated stereotypes on the participants' impression of a target person. The results showed that participants primed with the control-related words made a less negative impression of the target behavior than the participants primed with the neutral words.

Allport (1954) suggested that people might frequently try to suppress their prejudice for a variety of reasons. Consistent with this contention, recent research shows that people are less likely to engage in stereotyping when social norms against stereotyping are made salient (e.g., Devine & Monteith, 1999; Plant & Devine, 1998). People might also abstain from expressing prejudice as result of a genuine desire to be nonprejudiced. For example, those who embrace egalitarian beliefs, such as low-prejudice

people, may consider racial stereotyping an undesirable activity and try to avoid it (e.g., Devine, 1989; Devine & Monteith, 1999; Monteith, 1993).

Thus, there is some reason to believe that the motivation to avoid stereotyping can moderate the extent to which people can successfully control the influence of previously activated stereotypes on their subsequent judgments. It is possible that people with internalized egalitarian beliefs, such as college students, may find it easy to avoid the influence of highly accessible stereotypes than those with non-egalitarian beliefs (Devine & Monteith, 1999; Judd, Park, Ryan, Braver, & Krauss, 1995). This is particularly likely in the presence of a cue that prompts them to exercise self-control and suppress the activated stereotypes. Further, as the result of the present study indicates, people can refrain from using the activated stereotypes in their judgments even when such a cue is presented surreptitiously.

The present findings are in line with Devine's (1989; see also Gilbert & Hixon, 1991) contention that although stereotype activation might be uncontrollable, stereotype application might be controllable especially when people possess a strong motivation to avoid stereotyping. However, recent research suggests that motivation alone may not be enough for a successful inhibition of the activated stereotypes on judgments; people must also have sufficient cognitive resources to achieve their goals (Devine & Monteith, 1999; Wyer, Sherman, & Stroessner, 2000). This suggests that when people's attention is depleted for some reasons they are likely to engage in stereotyping. The outlook becomes rather bleak when one considers the fact that social information processing in every day life demands the deployment of considerable attentional resources (Stangor & McMillan, 1992). Thus, under these circumstances, perceivers may be less likely to avoid stereotypic responses (Devine & Monteith, 1999; Wyer et al., 2000). Further, Macrae et al. (1998) showed that spontaneous stereotype suppression can lead to a rebound effect, in which stereotypic responses are substantially increased after a period of suppression.

Thus, although the results of the present study suggest that the impact of activated stereotypes can be reduced by a covertly presented cue, further research is needed to clarify the conditions where controllability of activated stereotypes are possible. More specifically, future research may benefit from directly comparing the effects of implicit and explicit self-control instructions and exploring their relationship with the rebound effects.

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