THE EFFECTS OF AFRICAN-AMERICAN STEREOTYPE FLUENCY ON PREJUDICIAL EVALUATION OF TARGETS

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ABSTRACT

Research examining heuristics suggests recalling more stereotypic behavior might be as effective as recalling counter-stereotypic behavior for reducing prejudice. This research had participants recall African-Americans behaving in stereotypic or counter-stereotypic ways under easy or difficult recall constraints. Results demonstrated that participants recalling more stereotyped behaviors were less prejudiced toward African-Americans compared to participants recalling fewer stereotypes. Moreover, participants who recalled counter-stereotyped behaviors were less prejudiced than participants who recalled stereotyped behaviors, but only under easy recall constraints. The results suggest it is the ease of stereotypic recall that informs prejudice rather than the content or amount of stereotypes recalled.

INTRODUCTION

On August 9, 2014, 18-year-old Michael Brown was shot six times and killed by Officer Darren Wilson for resisting arrest and an assault on a police officer in Ferguson, Missouri. Quickly after the event, the Ferguson police department and media outlets presented different stories about the incident. The local police were quick to point out that Mr. Brown had a criminal history and released video footage of Mr. Brown allegedly robbing a convenience store. The media released additional information from supposed witnesses that had indicated that Mr. Brown was not resisting arrest, but instead had his hands up in surrender. In each case, the public's prejudices were informed by very little information. For many, their decisions on how to think about the case relied upon readily available, easily accessed information, and not necessarily upon a review of the many instances where police officers or individuals have behaved in consistent or counter-consistent ways. Part of the reasoning for this is that individuals seem relatively quick to

rely upon easy-to-recall information (Tversky & Kahneman, 1973). The present research examined how individual prejudices about subsequent targets can be biased by the relative ease of recalling stereotypes.

Race and Automatic Prejudices

Research on prejudice may explain how the release of information concerning Mr. Brown may have played a role in the perceptions and conclusions reached by the public (Macrae & Bodenhausen, 2000). For instance, Devine (1989) showed that the application of stereotypes involves both an automatic and a controlled component. During that research individuals who were primed with more stereotypic information of African-Americans were more prejudiced toward a target, compared to individuals primed with less stereotypic information. This was true for both highly prejudiced and non-prejudiced individuals. In that task, the judgments people made were quickly reached, much like that of a viewer watching a news release from law enforcement or media outlets. In another experiment, however, Devine showed that low prejudiced people could control the application of stereotypes, but only when they were aware of how they were making judgments. To that end, the easy and unexamined use of reported information may have biased public perception of Michael Brown's killing.

Other work has shown that people inadvertently thinking about a racial group may respond with prejudices automatically (Gilbert & Hixon, 1991; Sherman, Gawronski, Gonsalkorale, Hugenberg, Allen, & Groom, 2008, Tormala, Falces, Brinol, & Petty, 2007). In particular, research on the race bias in shooter paradigms shows that individuals are quicker and more erroneous in their decisions to shoot at African-American targets, compared to Caucasian targets (Ma, Correll, Wittenbrink, Bar-Ann, Sriram, & Nosek, 2013; Sim, Correll, & Sadler, 2013). Additionally, it is also the case that how well the information fits stereotypically or counter-stereotypically affects such biases (Wittenbrink, Judd, & Park, 2001). Specifically, when information is characteristic of a group, and consistent with cultural stereotypes, individuals more readily process and act on that information compared to when the information is not characteristic or is counter to the cultural stereotype. Though it may seem reasonable to condemn people from using cultural stereotypes, the suggestion of recommending that stereotypes not be used, may not be effective. Recent research demonstrates that individuals become more prejudice when they are made aware of their use of stereotypes (Duguid & Thomas-Hunt, 2015). Prior work has indicated that having individuals attempt to control stereotypic thinking may actually "back-fire" to cause more prejudicial judgment (Macrae, Bodenhausen, Milne, & Jetten, 1994).

The Availability of Information as a Judgment Strategy

One reason people might use stereotypes so readily and carelessly to inform their prejudices might be a tendency to think or reason heuristically (Tversky & Kahneman, 1973). According to Tversky and Kahneman, individual reasoning and judgment is strongly influenced by a series of mental shortcuts. These shortcuts, or heuristics, help individuals reach decisions without deliberating deeply about the topic at hand. As such, individuals are often biased by the relative availability of information, rather than by its content.

Previous research has examined how the ease of using information informs judgment (Schwarz, Bless, Strack, Klumpp, Rittenaur-Schatka & Simons, 1991). It was reasoned that individuals use

information in judgment making to the extent that the information is easy to report and apply. As such, some participants were asked to make judgments about their own assertiveness or unassertiveness when recalling only a few instances. Other participants, however, were given a more effortful task. These individuals were asked to recall many instances where they had been assertive/unassertive. It was found that when individuals were asked to recall relatively fewer instances, the content of the information was used as a basis for making judgments. Individuals who were asked to think of a few times they had been assertive rated themselves high in assertiveness, whereas people asked to think of a few times they had been unassertive rated themselves significantly lower in assertiveness. When individuals were asked to recall a great number of instances, however, the relative lack of recall fluency (e.g., easy of recall) was used as a basis for judgments. Individuals who were asked to think of twelve times they had been assertive rated themselves significantly lower in assertiveness, whereas individuals asked to think of twelve times they had been unassertive, rated themselves as higher in assertiveness. It was reasoned that when making judgments, the relative fluency of information is used heuristically to inform judgments. As such, when information is easy to recall, individuals make consistent judgments. When the information is difficult to recall, individuals heuristically infer the information to be false or "non-diagnostic" of the judgment and are more likely to reach a contrary evaluation. The same thinking might be found for prejudicial judgments.

Other research has shown similar effects of recall fluency and stereotypes for judgments about the self. For example, Keller and Bless (2005) asked participants to recall stereotypes about their group under easy (e.g., relatively few instances) or difficult (e.g., relatively many) recall conditions. Participants who recalled instances when stereotypes applied to themselves, rated themselves more poorly under easy recall conditions, compared to difficult recall conditions. Thus when applying stereotypes, individuals are more apt to use easily accessible information for a judgment, than information that is more difficult to access or recall. In fact, when the information becomes more difficult to recall (e.g., too many instances to easily recall), individuals are more likely to assess that difficulty as a judgmental heuristic of the "non-diagnosticity" of that information (Schwarz, 1998). The same may be true when individuals are asked to recall stereotypes about others. No study, however, has examined how individuals might use the relative ease of recall about stereotypes, when applying stereotypes to other groups.

Rationale and Hypotheses

This project will provide a basis for how the ease of stereotype and counter-stereotypic information about social categories is recalled, and how these stereotypes inform subsequent prejudices. Prior work has shown that people use information content when easily available (Tversky & Kahneman, 1973). Other research, however, shows that when information is available but difficult to recall (i.e., low in retrieval fluency), the fluency of recalling that information will become the basis of judgment, often to the contrary of the information content (Schwarz, 1998; Schwarz et al., 2001). As such, it was expected that participants who think of African-American males in stereotypic ways under easy recall conditions, will show more prejudice toward a subsequent male target, compared to participants asked to recall counter-stereotypic information, or compared to those asked to recall stereotypic information under difficult recall conditions.

METHOD

Participants

Eighty-one undergraduate participants (41 women, 30 men, 3 other, and 7 did not indicate; 23 African-American, 33 Caucasian, 3 Hispanic, 10 Asian, 10 other, 2 no race listed) participated for course credit.

Procedure

Participants were informed they would complete a study on cultural awareness and impression formation. In the study, participants were instructed to recall experiences they had with African-American men. At this point participants were randomly assigned to a 2 (Stereotypicality: Stereotypic behaviors; Counter-stereotypic behaviors) X 2 (Ease of recall: Easy recall, three behaviors; Difficult recall, eight behaviors) between design. Half of the participants were asked to report on times in which they could recall an African-American male acting in a stereotypic fashion. Others were asked to report on times in which they recalled an African-American male acting in a counter-stereotypic fashion, and were prompted that the behaviors were to be the "opposite of common stereotypes." Additionally, half of these participants were asked to recall three times they witnessed such behavior, whereas others were asked to recall eight times they witnessed such behavior.

After recalling the selected behaviors of African-American men, participants were then given an impression formation task. Participants were asked to judge selected traits of a man named Darryl who behaved in ways that could be perceived as somewhat aggressive or assertive by reading a paragraph description of his behavior (see Srull & Wyer, 1977). Participants assessed how strongly the target possessed nine positive and nine negative traits on 11-point Likert scales (0 = Not at all; 10 = completely has the trait; see list of traits below). Afterwards, participants were thanked for their participation and debriefed about the nature of the research.

RESULTS

The data was screened, and no missing responses were observed. Participants were first asked to recall and write about stereotypic or counter-stereotypic behaviors that had been performed by African-American men under easy (list three) or difficult (list eight) recall constraints. The numbers of instances reported were examined with a between-factors analysis of variance (ANOVA). That ANOVA indicated only a main effect for the recall fluency manipulation, $F(1, 77) = 106.43$, $p < .001$. That effect occurred because participants in the non-fluent recall condition were asked to list more recalls and did so ($M = 6.22$) than did participants in the fluent recall condition ($M = 2.84$). Neither the effect for stereotypicality [$F(1, 77) = 1.36$, ns], nor the interaction [$F(1, 77) = 1.01$, ns] were significant.

Participants were also asked to make trait judgments of the target, Darryl, on nine positive traits and nine negative traits. These 18 traits were then analyzed with a principle components analyses with varimax rotation that confirmed four factors that accounted for 66.18% of the variance (factor loadings > .356). Of these four factors, two were comprised of positive traits, and two with negative traits. For the positive traits, the first factor had seven positive traits (kind, loyal, caring, trusting, leader, punctual, respectful) and the second positive factor had two positive

traits (motived, driven). For the negative traits, the first factor had six negative traits (hostile, aggressive, stubborn, lazy, rude, and loud) and the second negative factor had three negative traits (unruly, sloppy, sneaky). Thus, these trait ratings were transformed into primary positive, primary negative, secondary positive, and secondary negative mean trait ratings.

For the primary positive traits, the mean ratings of the target by condition were analyzed with a between-factors ANOVA. That ANOVA indicated no significant main effects or interactions ($Fs < 2.24$, ns). For the secondary positive traits, the mean ratings of the target by condition were analyzed with a between-factors ANOVA. That ANOVA indicated only a marginal effect for the stereotypicality manipulation, $F(1, 77) = 3.51$, $p = .065$. That effect occurred because participants in the stereotypic recall condition had slightly higher positive trait ratings for the target ($M = 4.51$) than did participants in the counterstereotypic recall condition ($M = 3.60$). This effect, however, is somewhat inconsistent with the expected direction of the recalls.

For the negative trait ratings, however, a different pattern was revealed. For the primary negative traits, the mean ratings of the target by each of the conditions was analyzed in a between-factors ANOVA, that indicated a significant recall constraint X stereotypicality interaction, $F(1, 77) = 6.99$, $p = .01$ (the main effects for recall constraint and stereotypicality, however, were not significant, $Fs < 1.15$, ns.). As seen in Table 1, the interaction occurred because participants who were asked to recall stereotypic behaviors of African-American men in the easy recall condition made more negative trait ratings on the primary negative trait variable than did participants in the difficult recall condition, simple effects $F(1, 40) = 6.74$, $p = .013$; and because participants who recalled stereotypic behaviors under easy recall conditions made more negative ratings than did participants who recalled counter-stereotypic behaviors under easy recall conditions, simple effects $F(1, 38) = 6.58$, $p = .014$). In order to rule out any biased (polarized) responding for the trait ratings as being a possible explanation for the observed negative trait ratings, an Analysis of Covariance (ANCOVA), controlling for the positive trait ratings found the interaction remained significant, $F(1, 76) = 9.19$, $p = .003$, thus partially ruling out a polarized response bias counter-argument. Additionally, tests of the effects of gender or race of participants indicated no significant effects when included into the ANOVA analyses ($Fs = 1.50$; 0.313 respectfully).

Table 1. Primary Negative and Positive Trait Ratings toward the Target.

	Negative Trait Ratings		Positive Trait Ratings	
	Recall Three Behaviors (Easy)	Recall Eight Behaviors (Difficult)	Recall Three Behaviors (Easy)	Recall Eight Behaviors (Difficult)
Recalled Stereotypic Behaviors	8.57 (1.09) *21*	7.65 (1.21) *21*	7.48 (1.51) *21*	7.19 (1.77) *21*
Recalled Counter-Stereotypic Behaviors	7.41 (1.72) *19*	8.14 (1.54) *20*	8.06 (1.74) *19*	7.20 (1.86) *20*

Note: Standard deviations in parentheses, n per cell in italics.

For the secondary negative traits factor, however, no effects were found ($Fs < .827$, ns). This unexpected later result, as well as the later result for the positive traits might in part be a function

of the secondary trait factors being non-diagnostic for participants making the judgments. Notwithstanding, for the responses that comprised the primary negative factor, we found the expected results.

DISCUSSION

The present research showed that when using easy to recall stereotype-consistent information about members of racial groups, people used that information when making judgments. Easy to recall stereotypes led to prejudice, whereas easy to recall counter-stereotypes reduced prejudice. The same, however, was not true when that information was difficult to recall. In terms of how individuals judged the shooting of Michael Brown, we feel that individuals used fewer instances of stereotypic information when agreeing with the reports of police, but more likely used a few counter-stereotypic instances of information when disagreeing with those reports (perhaps agreeing with media stories that Brown was surrendering during the shooting).

When under easy recall constraints participants made consistent judgments with stereotypes or counter-stereotypes, and when under difficult recall constraints participants made counter-consistent judgments. Though this is counter-intuitive, it is consistent with prior findings on the availability heuristic (Schwarz et al, 1991). One reason for this is that difficult to recall information is judged to be low in diagnosticity of a specific judgment. This low diagnosticity is then used heuristically to infer the opposite judgment. We feel the same has happened in the present study with stereotypes leading to prejudicial thinking.

A number of other studies have shown a beneficial outcome for negative information low in diagnosticity (Fox, 2006; Fuller, McIntyre, & Oberleitner, 2013; Keller & Bless, 2005). Of particular relevance to the present findings, Keller and Bless (2005) showed that individuals who recalled times they had performed worse than others (stereotypic bad) under difficult recall constraints did better than individuals recalling such stereotyped poor performances under easy recall constraints. It is possible then, that exceeding the diagnostic utility of negative information is one way to combat the negative behaviors following such information. We feel that similar effects are seen with the present study on the application of stereotypes.

Limitations and Future Directions

The present study found no effect with race of participants on the judgments toward a target under the different recall conditions. Although this finding suggests that the race of participants did not matter, such a conclusion may only be tentative, given that race was not evenly distributed across conditions. It may be the case however, that race did not play a big role. In other research on similar automatic responses, African-American participants have shown a bias against African-American targets in many tasks (e.g., Nosek, Banaji, & Greenwald, 2002). At present, the findings of the study suggest, that when under more "automatic thinking" situations, cognitive biases may have an effect regardless of the race of the perceiver. Future research, however, might do well by more equally testing such an effect to see if the same results could be found when participants of different ethnicities are equally distributed across conditions.

Additionally, it may also be the case that the recalls of participants thinking of stereotypic good or bad behaviors might not be equal in salience. It is possible that for some people thinking of stereotypic negative actions is very easy to recall, but thinking of any counterstereotypic positive

actions might not be easy to recall because of positive-negative recall asymmetries. Future research might attempt to control for the salience and relative ease of such recalls, or manipulate the presentations of such behaviors under easy and difficult recall conditions. One way this could be done is through the use of video game characters. The character skin color could be manipulated, allowing different ethnicities to be placed in the same condition across participants, and thus create both positive and negative behaviors that might be controlled for similar levels of salience. By manipulating the game environment the target characters could be set in either stereotypical or counter-stereotypical situations, and then memory for those events and subsequent perceptions could be measured.

Conclusion

We feel these results demonstrate that stereotypes are used heuristically when making prejudicial judgments, and may in part be an explanation for how individuals come to relatively knee-jerk reactions toward media-hyped police confrontations with African-American men. The findings might be an additional mechanism to understand and regulate stereotypes in the public eye. Prior work has used intuitive reasoning to reduce prejudice in settings, but often with counter-intuitive results (Duguid & Thomas-Hunt, 2015). The present studies suggest, that requesting perceivers to recall many stereotypic instances or only a few counter-stereotypic instances might be an effective intervention for reducing prejudicial judgments.

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APPENDIX A.

Correlation of variables.

	1	2	3	4	5	6	7	8
1 Gender								
2 Race	.198							

		1	2	3	4	5	6	7	8
3	Number of behaviors recalled	-.055	-.146						
4	Number of recalls assigned	.052	-.20	.759**					
5	Stereotypicality	.055	.018	.094	.013				
6	Primary Positive Traits	.268*	.045	-.034	-.163	.083			
7	Secondary Positive Traits	.285*	.053	.175	.078	.205	.505**		
8	Primary Negative Traits	.169	.047	-.066	-.046	-.113	.284*	-.029	
9	Secondary Negative Traits	.009	.071	-.216	-.104	.044	.215	.108	.326**

Note: * $p < .05$; ** $p < .01$.

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