

The Effects of Gender Stereotypes, In/Out Systems, and System Justification in Women

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Abstract

Complementary stereotypes appear to praise a group, but inherently contain a negative stereotype (“women are better team-players” implies women are poor leaders). Exposure to these stereotypes tends to increase women’s support of the social status quo even as women continue to be socially disadvantaged—System Justification Theory (SJT) posits that this is due to a motivation to believe we live in a just society. This study explores whether or not SJT holds when complementary stereotypes are presented as being part of a society in which one does not live (out-system), thereby removing the proposed motivation to justify. The study also explored how stereotype exposure affects women’s implicit endorsement of future gender stereotypes, and whether this is caused by mere exposure or system justification. Results showed that in-system stereotypes increased system justification while the same stereotypes presented as part of an out-system decreased system justification, compared to controls. In addition, only subjects in the group with increased system justification were more likely to later implicitly endorse stereotypes of women, showing it is system justification not mere exposure that produces this phenomenon. The study’s results imply that seemingly positive societal views of women may actually hamper women’s recognition of gender inequality in America or steps by women to remedy this.

Introduction

Stereotyping and prejudice are problems that our country has tried to address for years, from the end of segregation in the *Brown v. Board of Education* case to Title IX. Psychology studies abound on topics such as the development of stereotypes, their activation, and maintenance (for review, see Hilton & von Hippel, 1996). Despite the many advances made over the years by women, sexism and gender stereotypes continue to plague societies around the world. This particular group also holds the odd distinction of being a socially disadvantaged group in which many members voice the opinion that not only is the status quo just fine, but attempts to change it are quite bad. Some of the most vocal critics of the Equal Rights Amendment were in fact women, such as political activist Phyllis Schlafly, who felt that perceived inequality in some areas was offset by social privileges (i.e., exemption from military draft) that would be lost under the ERA (Kolbert, 2005). Still, some of the most interesting research centers on how exposure to stereotypes can alter cognitions and behavior, possibly explaining some of the many characteristics of women, who although they make up half the world's population are often socially disadvantaged. Women are constantly exposed to gender stereotypes and this no doubt affects them in many ways. Even in the modern world, subtle discrimination and stereotyping may cause dramatic negative effects in women even if they do not realize they are being stereotyped or discriminated against. This study investigates how exposure to such stereotypes affects women's appraisal of society and its treatment of women, as well as gender stereotype endorsement.

Exposure to stereotypes has been shown to have a multitude of effects on people, whether or not they are the targets of the stereotypes. One study found that when college students were primed with words related to the elderly the students' stereotypes of the elderly

were activated and they actually walked slower when leaving the laboratory (Bargh, Chen, & Burrows, 1996). This demonstrates the power of stereotype exposure and the unusual effects it can have. While walking slowly after thinking about growing old is a comical effect of stereotype exposure, the phenomenon also appears in much darker forms.

Steele and Aronson (1995) demonstrated the existence of stereotype threat, or the fear that one's behavior will confirm existing stereotypes about one's group, and that the result can be impaired performance. Their study administered the Graduate Record Examination to white and African-American participants, telling half that their intelligence was being measured and half that it was not—white participants performed equally well in either condition but African-Americans performance suffered when they thought their intelligence was measured. The cause? The participants were reacting to the fear of fulfilling the stereotype of African-Americans having lower IQs.

Other studies of stereotype threat found that it reduces working memory capacity, which is another factor in lowered performance (Schmader & Johns, 2003). Interestingly, multiple identities of participants also affect stereotype threat. Sinclair et al (2006) found that in a sample of Asian-American women, activating the Asian stereotype improved performance on a math test, while activating the female stereotype lowered performance in accordance with the stereotype.

Stereotype activation does not only lead to lower performance on academic measures, but also to behavior on the part of targets. Sinclair et al (2005) found that when female participants were told they would be interacting with another social actor who supposedly held stereotype-consistent views of women they viewed themselves as more stereotypically feminine and behaved in a more feminine manner, if they had a strong motivation to bond

with the partner. However, if the participants had a strong affiliative motivation to bond with a partner who supposedly held stereotype-inconsistent views of women, the participants viewed themselves as less feminine and behaved accordingly. The authors called this phenomenon social tuning of the self and postulated that social tuning occurs because participants desire to create a shared reality with their partners. Shared reality theory in turn argues that social regulation is central to social cognition (Lowery et al., 2001).

The most striking facet of the research on affiliative motivation is that the findings held true even when social tuning meant participants were putting themselves at a disadvantage. In another experiment by Sinclair et al (2005) African-American students were told they were trying out for a scholastic team, and they then observed “David,” a white male filling out forms in another room. Some participants were told that David was also trying out for the team (low affiliative motive), while others learned that he was in fact the team’s captain who would help pick his team members (high affiliative motive). David was also described as holding stereotype-consistent or inconsistent views of African-Americans. The result was that participants in the high affiliative motive condition developed more stereotype-consistent self views and portrayed themselves as being less intelligent in order to create a shared reality with David. This is so startling because the strong motive to affiliate actually resulted in participants hurting their chances of successfully making the team!

Perhaps even more troubling is recent research demonstrating that minority group members may be unwittingly furthering their subjugation. According to system justification theory (SJT), the innate desire to see the world in which one lives as “fair, legitimate, and desirable” one will rationalize the status quo even if it is personally disadvantageous (Kay & Jost, 2003). Disturbingly, it has been purported that this tendency to system justify has

resulted in disadvantaged groups accepting the status quo of inequality rather than acting to change society for their betterment (Kay et al., 2007). This might explain the demonstrated tendency for out-group favoritism found among low-status group members (Jost & Banaji, 1994). What elicits such justification? The answer appears to be benevolent and complementary stereotypes. These stereotypes may appear to compliment or elevate their targets but also carry a negative aspect. For example, Glick and Fiske (2001) found that women are stereotyped as being “warm” and good at the role of team player, but these positive qualities also carry the negative connotation that women are ineffective leaders.

Jost and Kay (2005) found that mere exposure to benevolent or complementary stereotypes served to increase socially disadvantaged group members’ (women’s) support for the social status quo in general and in regard to gender, although hostile stereotypes (Glick & Fiske, 2001) did not. Stereotypes did not increase system justification among socially advantaged groups, in this case males (Jost & Kay, 2005). Similar results in support of system justification theory are evidenced in work on complementary stereotypes which ascribe positive attributes to the disadvantaged (“poor but happy”) and negative attributes to the advantaged (“rich but miserable”), demonstrating the power that stereotyping has in allowing us to believe in a fair and just world. Exposing participants to the stereotypes “poor but happy” and “poor but honest” *or* the stereotypes “rich but miserable” and “rich but dishonest” led to very high scores on a measure of system justification (Jost & Kay, 2003). In these cases, the system seems fair as long as personal characteristics balance out life circumstances. It might seem horribly unfair for a poor person to be miserable and a rich person happy (as is likely to be found in reality), but by balancing out situation we can assume the world has some sort of justice—and from there we derive old stereotypes of the

wealthy but miserable Scrooge characters, and destitute but joyful Tiny Tim. Still, there is much more to be investigated in system justification theory and in-group stereotyping.

Interestingly, research has shown that while negative stereotyping of one's in-group occurs (Biernat, Vescio, & Green, 1996), presenting negative in-group stereotypes to participants has not been shown to induce system justification (Kay et al., 2007). This might suggest reverse causality but Kay et al. (2007) did not find a relationship between explicit endorsement of stereotypes and system justification. However, it appears that negative in-group stereotyping may still be related to system justification on an implicit level by increasing *future* stereotyping behavior, and implicit measures should be used to examine this relationship. Previous research has shown that information inconsistent with stereotypes or expectancies is spontaneously explained away to resolve the inconsistency. Stereotype inconsistent information sparks attributional processing that explains the unexpected behavior in situational terms, but stereotype consistent information does not lead to this process—this is called the stereotypic explanatory bias (Vargas, Sekaquaptewa, & von Hippel, 2007). While participants may be unwilling to explicitly declare that they endorse gender stereotypes they may still exhibit the stereotypic explanatory bias.

These processes are all important because of their far reaching consequences. Benevolent and complementary stereotypes abound in every day life, and if exposure leads to their implicit endorsement then they are extremely difficult to counter. These stereotypes need not always be explicitly expressed; they may arise in someone's behavior. A good example of this is in elementary school teachers' treatment of male and female students. Dweck et al (1978) found that teachers' praise gave less emphasis to the quality of work done by girls compared to boys, and that teachers attributed success for girls to effort rather than

innate ability as they did with boys. This may inadvertently cause girls to believe the complementary stereotype that they are not as smart as boys, but they are hard-workers. Teachers also tended to praise girls for their good behavior, even when it was irrelevant to the day's lesson (Golombok & Fivush, 1994). This may lead girls to the complementary stereotype that even if boys rule the domain of academics, girls rule the domain of social behavior and obedience to rules. While unintentional on the part of the teachers, this *praise* may actually inculcate the very stereotypes that lead to so many problems for the girls as they become women.

The present study sought to further explain the causes and effects of system justification. If system justification theory is truly about rationalizing society to be legitimate to make one feel more secure and in control (Kay et al., 2007), then people should system justify when thinking of the society in which they live. Previous studies have investigated this and found it to be the case, but system justification should be less strong when one is asked to evaluate another society that is not personally relevant for ideas of safety and security. To investigate this, manipulations should be made to compare in- and out-system justification in the presence of benevolent or complementary stereotypes. Additionally, it seems likely that once one has already justified the society in which one lives as legitimate, even with its inequality, it would be difficult not to accept some degree of negative stereotyping to avoid cognitive dissonance. Increased system justification should lead to greater endorsement of in-group stereotypes, at least on an implicit level. Specifically, it was hypothesized that system justification in response to benevolent and complementary stereotyping will be higher for an in-system than an out-system, and that increases in implicit

negative in-group stereotyping (as seen in the stereotypic explanatory bias) will occur only after one has system justified.

Method

Participants

The 85 participants for this study comprised a convenience sample drawn from the female undergraduate population at American university, a liberal, mid-Atlantic university. The study's participants were mostly Caucasian at 66 participants (77.6%), along with 2 Hispanics (2.4%), 5 African-Americans (5.9%), 12 Asians/Pacific-Islanders (9.4%), 2 self-identified biracial participants (2.4%), and 2 participants who identified themselves under the label "other" (2.4%). The sample included 27 freshmen (31.8%), 21 sophomores (24.7%), 5 juniors (5.9%), and 32 seniors (37.6%). Participants were recruited by posting information in the psychology department and in psychology classes offering extra credit in exchange for research participation in a study investigating the judgment of social systems. Participants were randomly assigned to three conditions, with 27 participants in the control group and 29 participants in each of the two experimental groups.

Instrumentation

Basic demographics regarding university class level and ethnicity of participants was collected in addition to several main measures and a single filler questionnaire. Three different vignettes were used in order to expose participants to the desired primes. All three were presented as excerpts from magazine articles discussing observations about the society in which they were written. The prime for the in-system group discusses American society and exposes participants to several items from the benevolent sexism subscale of Glick and Fiske's Ambivalent Sexism Inventory (2001), including, "Women, compared to

men, tend to have a superior moral sensibility,” and “Women should be cherished and protected by men.” The out-system group was presented with the same stereotype primes, only the article referred to the imaginary country “Buriyatia.” An imaginary country was used instead of a real foreign country in order to prevent personal feelings about any particular country from influencing responses. Both contained neutral filler information such as “the most popular favorite color is blue.” The neutral prime for the control group simply removes all items from the Ambivalent Sexism Inventory, leaving only the neutral items. The instructions with the primes indicated that the participants would be answering questions after they read the passage—this was done to ensure that the participants actually read the primes and were exposed to the stereotypes before answering the system justification questionnaires and assuming that they all referred to American society. To keep with this cover story, participants also filled out a short filler measure to ostensibly rate the primes’ clarity and understandability. This follows Jost and Kay’s (2005) procedure which showed that mere incidental exposure to stereotypes will activate system justification.

Levels of system justification were measured in two ways, using the Gender-Specific and Diffuse System Justification Scales (Kay & Jost, 2003; Kay et al., 2005). Each consists of eight items rated on a 9-point Likert-type scale ranging from 1 (indicating “Strongly Disagree”) to 9 (“Strongly Agree”) measuring views on the fairness or justification of the social system—for this study the measures are altered slightly so that the words “United States” and “American” are changed in the out-system condition to reflect the imaginary “Buriyat” society. The Gender-Specific scale uses items such as “Most policies relating to gender and the sexual division of labor serve the greater good,” and “Sexism in society is getting worse every year,” while the Diffuse scale employs similar items reflecting a broader

view of society. The Diffuse scale includes items such as “Most policies serve the greater good,” and “Our/Their society is getting worse every year.” The SJT scales are reliable with an internal consistency coefficient of .87, and showed convergent validity with closely related scales (Kay & Jost, 2003). In the present study the Gender-Specific and Diffuse SJS both exhibited strong reliability, with respective Chronbach’s $\alpha = .811$ and $.825$.

Finally, to assess the effect of system justification, or stereotype exposure, on stereotyping of one’s in-group, the Stereotypic Explanatory Bias scale (SEB; Sekaquaptewa et al., 2003) will be used. The SEB contains 22 sentence stems that can be finished by the participants in any grammatically correct fashion. The SEB consists of sentence stems with male and female characters performing either stereotype consistent, inconsistent, or neutral behaviors (“Joanne sewed the button back on,” “Karen changed the oil,” “Rebecca brushed her teeth”). A second version of the SEB is used as a counterbalance where the behaviors and genders are switched. The SEB was rated by two independent judges as to whether the stems were completed with explanations of the behaviors or not. For example, the sentence stem “Karen changed the oil,” which is stereotype-inconsistent, could be finished in several ways. If a participant wrote “Karen changed the oil because her brother wasn’t there to do it” the response would be judged as an explanation for the inconsistency, as opposed to an answer such as “Karen changed the oil in the car last weekend.” Inter-rater reliability was very high, with $r = .86$, and $p < .01$. Therefore in cases of disagreement the judgment of the primary investigator was used. For each participant, the number of explanatory responses was then counted, with higher scores indicating a greater degree of stereotyping. Validity for the SEB is seen in its correlation to similar measures of implicit stereotyping and predictive validity

regarding intergroup behavior and interaction quality (Vargas, Sekaquaptewa, & von Hippel, 2007).

Procedure

Participants came to the laboratory and were told they would read a short passage and answer questions about the passage and how they evaluate social systems. After obtaining informed consent, the participants were given the primes to read and answer the proofreading questions before filling out the Gender-Specific and Diffuse System Justification Scales. After completing these scales the participants completed the SEB—it was necessary to go in this order as it was hypothesized that only after a person system justified would she be more likely to endorse gender stereotypes. Finally, demographic information was collected. This was the last step in order to avoid priming participants regarding their gender or ethnic group before they fill out the measures. After finishing the experiment, materials were sealed in an envelope separate from identifying information; participants were debriefed regarding the minor deception involved in the filler proofreading task, given their extra credit, and thanked for their participation.

Results

Descriptive Statistics

Overall, the distributions of data appeared fairly normal for the SEB and both the Gender-Specific and Diffuse versions of the System Justification Scale. Total scores on the Gender-Specific System Justification Scale ranged from 12 to 55, where scores were computed by summing ($M = 37.15$, $SD = 9.82$). Scores on the Diffuse System Justification Scale were also computed by summing and ranged from 12 to 57 ($M = 35.55$, $SD = 9.42$). Scores on the Male and Female sections of the Stereotypic Explanatory Bias Scale were

computed by summing the number of explanations for stereotype-consistent items and subtracting that number from the sum of explanations for stereotype-inconsistent items. Total scores on the Female-SEB ranged from -2 to 3 ($M = 0.38$, $SD = 1.14$), and total scores on the Male-SEB also ranged from -2 to 3 ($M = 0.047$, $SD = 1.1$).

Inferential Statistics

For all statistical tests alpha was set at .05. A check on randomization was performed regarding participants' class level and ethnicity. A chi-square test of condition and class level showed no statistically significant differences between groups, with $X^2 = 7.18$, $p > 0.3$. A second chi-square test of condition and ethnicity also showed no statistically significant group differences, with $X^2 = 14.1$, $p > 0.17$. This supported the idea that random assignment was successful for the study.

System Justification

The first hypothesis of the study was that exposure to complementary and benevolent stereotypes presented as in-system ("American") would lead to increased system justification, while the same stereotypes presented as out-system ("Buriyatia") would lead to lesser system justification. This was supported by a one-way ANOVA test of condition and Gender-Specific SJS scores, with $F = 20.675$, $p < 0.0001$. As predicted, the "American" group scored the highest ($M = 43.48$, $SD = 7.25$), which was significantly greater than the control group ($M = 38.15$, $SD = 8.93$), $p = .042$, and the "Buriyat" group ($M = 29.896$, $SD = 8.1$), $p < 0.0001$. Also in accordance with the hypothesis, the "Buriyat" group scored the lowest, significantly less than the "American" and control groups (the latter with $p < .001$). Results were very similar in regards to the Diffuse SJS score, with $F = 10.37$, $p < 0.0001$. The "American" group scored highest ($M = 41.2$, $SD = 8.54$), followed by the control group ($M = 34.0$, $SD =$

7.65), with the “Buriyat” group scoring lowest ($M = 31.34$, $SD = 9.24$). The difference was statistically significant for the “American” group (both p -values < 0.01), although the difference between the “Buriyat” and control groups was non-significant ($p = .447$) (see Table 1). In addition, a correlational analysis of scores on the Gender-Specific and Diffuse versions of the SJS showed that the two were highly correlated. The two system justification scales exhibit a positive relationship, $r = .778$, $p < 0.0001$, $R^2 = 0.605$.

Stereotypic Explanatory Bias

The second hypothesis of the study was that the group that system justified (the “American” group) would express greater stereotypic explanatory bias than the groups that were exposed to stereotypes and did not system justify, as well as the control group. A one-way ANOVA performed on condition and Female-items of the SEB scale supported this hypothesis, with $F = 3.09$, $p < 0.05$, where the “American” group ($M = .759$, $SD = 1.15$) scored the highest, significantly greater than the control group ($M = .037$, $SD = 1.16$), and the “Buriyat” group ($M = .31$, $SD = 1.04$), both p -values $< .05$. Unexpectedly, the control group’s average Female-SEB score was greater than that of the “Buriyat” group, yet there was no statistically significant difference between the two groups (see Figure 2). A one-way ANOVA was also performed using condition and the Male-items of the SEB, but no significant differences were found between the groups, $F = 0.24$, $p = 0.79$. A correlational analysis also failed to find a relationship between the Female and Male sections of the SEB, with $r = -0.08$, $p = 0.465$.

Other Analyses

To examine the impact of ethnicity and year in college on system justification and stereotypic explanatory bias factorial ANOVAs were performed. The results of these tests

were all non-significant. For the Gender-Specific and Diffuse SJS, there was a main effect of condition, $F = 8.47, p < .001$ and $F = 1.67, p > 0.10$, respectively. This was not true for class level, $F = 1.93, p > 0.1$, and $F = 0.08, p > 0.90$, or for ethnicity, $F = 1.69, p > 0.10$ and $F = 1.16, p > 0.30$. There was also no interaction between condition and class, $F = 0.94, p > 0.40$ and $F = 0.60, p > 0.70$, or between condition and ethnicity, $F = 0.54, p > 0.70$, and $F = 1.02, p > 0.40$. Similar results were seen for the SEB, condition, and class or ethnicity. For Male and Female items respectively, there were no main effects of either class, $F = 0.16, p > 0.90$, and $F = 1.93, p > 0.10$, or for ethnicity, $F = 1.65, p > .10$, and $F = 0.87, p > 0.50$. Additionally, there was no interaction between condition and class, $F = 1.73, p > 0.10$, and $F = 0.41, p > 0.80$, or between condition and ethnicity, $F = 1.26, p > 0.20$, and $F = 1.17, p > 0.30$. There was a main effect for condition for the Female-SEB, $F = 3.41, p < 0.05$, but not for the Male-SEB, $F = 0.73, p > 0.40$.

Discussion

This study sought to explore the links between complementary and benevolent stereotypes of women, assessment of a social system's fairness, and implicit endorsement of gender stereotypes. It was hypothesized that exposure to these stereotypes would only increase system justification when presented as part of American society, or in-system, while presenting them as part of an out-system would remove the just-world motivation and decrease the level of system justification. It was further hypothesized that the group that system justified at the higher levels would be the only one to experience greater levels of stereotypic explanatory bias. In general, the results of the study supported the hypotheses although there were a few caveats.

The three conditions displayed no significant differences in terms of self-identified ethnicity or year in college, so it appears safe to assume that random assignment was successful and other unmeasured characteristics were also evenly spread amongst groups. This supports the notion that the only initial difference between participants in each condition was which prime was presented to them. Ethnicity and class level did not appear to influence either system justification or stereotypic explanatory bias, yet this conclusion is dubious due to fact that the vast majority of participants were Caucasian. While it is unlikely that year in school would have a major impact on the results, it is possible that in a sample with a more balanced ethnic makeup minority status could affect responses. However, minority group members who participated in the study all held dual-identities as minorities *and* women, and as seen in the Sinclair et al (2006) study activating one identity can suppress the influence of the other. Therefore it is still possible that ethnicity does not have a measurable impact on the concepts examined.

In support of the first hypothesis, participants in the “American”/in-system condition reported significantly higher levels of gender-specific system justification than controls, while participants in the “Buriyat”/out-system condition displayed significantly lower levels than controls. For the diffuse scale the in-system condition again reported the highest system justification significantly greater than the other groups; while, as expected, the out-system group scored the lowest, the difference between the out-system group and controls was not statistically significant. This last point may simply be due to the low power of the study and likely a larger sample size would have found the difference to be significant. Scores on the two versions of the SJS were highly correlated, where high scores on the Gender-Specific SJS were related to high scores on the Diffuse-SJS. Scores on one contributed roughly 60% of the

variability of scores on the second scale. The strong relationship between the two makes a good case for low power being the culprit behind the unexpected finding on the Diffuse-SJS. Another possibility is that the stereotypes exposed to participants were all gender focused so they may have elicited the phenomenon more strongly in that domain. Another explanation is that because the prime was the only exposure to “Buriyat” culture, and as such participants received more information about the society’s gender roles, it caused them to rate the overall society more neutrally.

Overall, the results from the first part of the study provide support for system justification theory. The increased system justification observed in the in-system group replicates earlier findings that exposure to complementary or benevolent stereotypes increases women’s support for the social status quo (Jost & Kay, 2005). The results also give further weight to the claim that system justification is based on our motivation to believe we live in a just-world. The out-system group was specifically designed so that this particular motivation was irrelevant—participants in this condition do not live in Buriyatia, and therefore have weaker personal connections to the “country on the other side of the world” and weaker motivation to excuse its flaws. If Buriyatia is an unjust society there is no immediate threat to participants, no reason to system justify, and every reason to recognize the inherent hypocrisy or injustice of the gender stereotypes. The conclusions that can be drawn from these findings include not only support for system justification theory, but also that it may be easier for us to identify social inequality in cultures other than our own. The implication being that American women may accept subtle discrimination in their own lives, never realizing its presence or believing it to be justified and balanced, while observing the same discrimination elsewhere and being able to stand up to it.

The second hypothesis, that only those who system justified would experienced an increase in implicit endorsement of gender stereotypes, was also supported but only for female stereotypes. Participants in the in-system condition were significantly higher in stereotypic explanatory bias for female items on the SEB than the other groups, and although the out-system group scored slightly higher than the control group the difference was non-significant. This seems to support the hypothesis that system justification, not mere stereotype exposure, is the mechanism that increases implicit stereotype endorsement. However, exposure is likely responsible for some degree of priming that influences the stereotypic explanatory bias, which explains why the out-system group scored slightly higher on the SEB than the control group. The contribution of simple priming is probably only very weak, explaining why the difference was not statistically significant.

While both the in-system and out-system groups saw the exact same stereotypes, only the group that system justified was more likely to exhibit stereotypic explanatory bias. This implies that exposure to complementary and benevolent stereotypes in a woman's own society not only blinds her to subtle inequality but may also cause her to on some level believe the stereotypes about gender roles that perpetuate the gender inequality. More fundamentally, the fact that women had already gone through the effort to system justify means that they had to accept that some stereotypes about women are true in order to avoid cognitive dissonance. This is because they had already deemed American society as being legitimate and fair, even with its level of gender inequality, therefore in order for it to be a just-world *some* stereotypes must hold *some* truth even if they have negative connotations.

Despite the effects seen with the female items, none of the groups exhibited a high degree of stereotypic explanatory bias in response to male items, and there were no statistical

differences between scores on this section of the SEB. This may be due to participants focus on women's issues and the fact that all the participants are female. There was also no relationship between responses to Female-SEB items and responses to Male-SEB items. This finding, coupled with the overall low scores for male items regardless of condition, suggests that women may have different processes in their stereotyping of men versus women.

Possible Moderators

While the motivation to believe we live in a just world was hypothesized as the causal mechanism for system justification, there may be other mechanisms at work. Personal feelings about the current political administration, political orientation, and a sense of patriotism may have affected system justification scores. Personal feelings of discrimination—gender and otherwise—may also have affected how participants viewed the state of society. Possibly these emotions are strong enough to over power the effects of the primes in some participants.

Limitations

A main limitation of the study involved sampling. With 85 participants spread over three conditions each group was just under 30 participants, giving the study low power. Additionally, the sample itself was not ideal. Drawing a convenience sample from the undergraduate students at American University left the participant pool fairly homogenous, and because of practical constraints, such as time and the number of available males, only females were included in the sample. As such, the study can only speak to how young, college educated women might behave. Roughly 77% of the sample was also Caucasian, so valuable information about how women with a dual-identity as minority group members may react to system justification is absent. The sample is also flawed in that all participants

volunteered in exchange for class credit, and all attended a private university well known for being politically active and liberal. For these reasons the generalizability of the study may not be very strong.

Other limitations arise in the methodology. While Jost and Kay (2005) found that incidental exposure to stereotypes provoked system justification they only studied the effect in-system, or by using Americans in an “American” condition. Americans possess a wealth of cultural and historical knowledge about the country they live in but here participants were asked to answer questions about an imaginary out-system of which they had only the briefest knowledge. While this was done to avoid confounding the results with personal feelings towards other cultures it also removed the psychological realism. In addition, by the time participants completed the SEB they had already been exposed to the primes and the two system justification scales which focused their attention on issues of gender and equality. This may have unintentionally altered participants’ responses on the SEB. Finally, the participants in the control condition received only neutral information but the passage itself may have also unintentionally primed them with the concept of America and altered their responses.

Future Directions

This study answered several questions, but also raised many more. Future studies should investigate whether or not factors such as socioeconomic status, minority group membership, and political orientation affect system justification and future implicit stereotyping. These studies should be large and include enough participants to make comparison possible, for example, a study looking into the role of minority group status should not use a sample as ethnically skewed as this study did. A replication of this study

would certainly include male subjects so they can be compared to their female counterparts. Perhaps a future study could assign participants to arbitrary in- and out-systems to eliminate the imbalance in knowledge of the systems, although this approach would further detract psychological realism. The use of confederates may be helpful in a study of arbitrary in- and out-systems in order to give the study greater realism. The use of less homogenous samples and replications tweaking the design for other socially disadvantaged groups would also help counter the limitations to generalizability seen in the present study. Most importantly, future studies should also be conducted to see what, if any, interventions can be done to eliminate the negative effects of exposure to seemingly innocuous stereotyping.

Conclusion

The results of this study demonstrate some of the effects of exposing women to complementary and benevolent stereotypes about women. When these stereotypes are presented as part of a woman's own society they can lead to increased support for the social status quo, even as women continue to be disadvantaged in American society, while the same stereotypes presented as part of an out-system provoke a negative appraisal of the society. Additionally, women who have system justified also show significantly greater stereotypic explanatory bias than both controls and women who were exposed to identical stereotypes but did not system justify.

Taken together these results imply that American women may system justify in response to common comments and gestures that reinforce these stereotypes, and they may not identify or stand up to discrimination. Worse, this may perpetuate the act of women stereotyping other women and enable the process to continue unabated. Simple acts that may seem kind, praising a woman for always being a team player or acts of chivalry on the part of

men, could potentially hold negative side effects stemming from system justification. This is especially troubling given that the process begins in young childhood and is unintentionally reinforced by teachers who differentially praise girls for effort rather than innate ability (Dweck et al., 1978) and for behaving politely rather than for being opinionated (Golombok & Fivush, 1994). Behavior such as this sends the message of the stereotype without necessarily being direct, and likely without the intention to do any harm. While these stereotypes and behaviors may seem innocuous—they are called benevolent stereotypes for a reason—they nevertheless hold the potential to further disadvantage women. Luckily, this study also points out that we can identify the inherent inequality in other cultures, so perhaps we can help others even if we cannot see what action should be taken to improve our own position.

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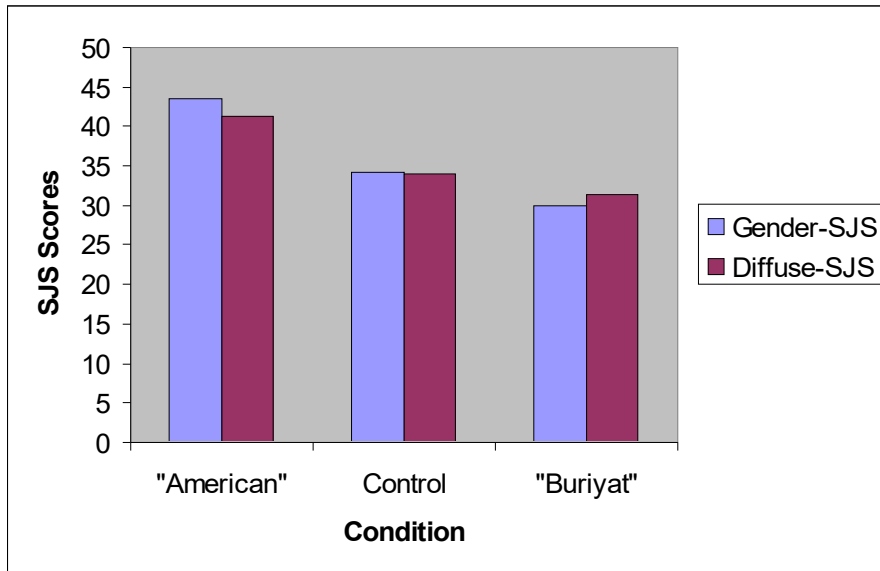


Figure 1. System Justification Scores by Condition

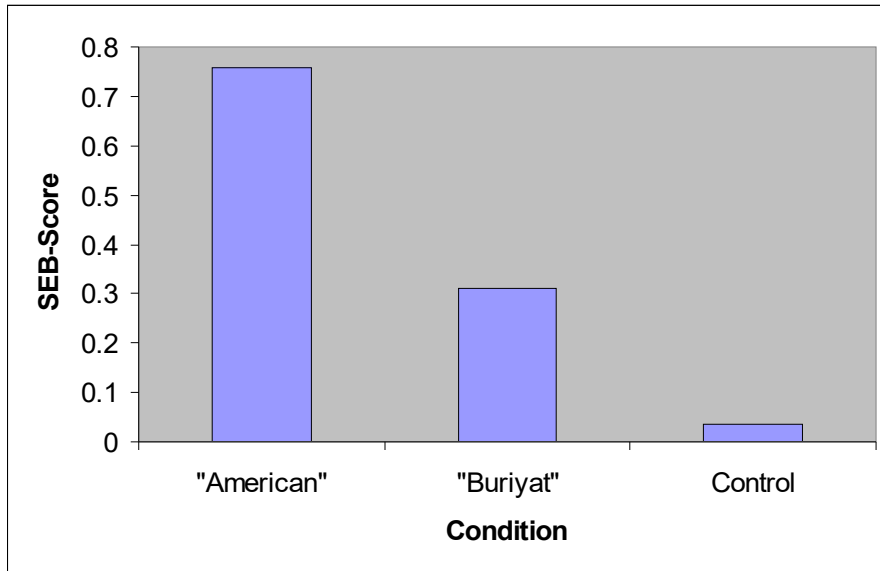


Figure 2. Stereotypic Explanatory Bias (Female-items) Scores by Condition