The Peacock Effect: The Influence of the Opposite Sex on Aggressive Behavior

Kira J. Mason
Gettysburg College

Follow this and additional works at: https://cupola.gettysburg.edu/celebration

Part of the Applied Behavior Analysis Commons, Experimental Analysis of Behavior Commons, Personality and Social Contexts Commons, and the Social Psychology Commons

Share feedback about the accessibility of this item.
Most widely-accepted models for aggression do not explicitly address an important variable that roots in evolutionary psychology: the presence of a potential mate. The current research investigates whether the presence of an attractive or unattractive member of the opposite sex influences hypothetical aggression. Participants (N = 1035) imagined themselves in front of an attractive or non-attractive member of the opposite sex (accompanied by pictures of corresponding attractiveness levels), and indicate their aggressive intentions after a provocation, or not. Results from the 2(sex) x 2(attractiveness) ANOVA showed that males viewing an image of an attractive female aggressed more when provoked than males viewing a non-attractive female. These effects were absent for females.

Location
CUB Ballroom

Disciplines
Applied Behavior Analysis | Experimental Analysis of Behavior | Personality and Social Contexts | Psychology | Social Psychology

Comments
Psychology Honors Research
The Influence of the Opposite Sex on Aggression
Kira Mason
Gettysburg College

INTRODUCTION
Research suggests that humans, like many animals, alter their behaviors to attract potential mates. Male risk taking increases in the presence of an attractive member of the opposite sex (Ronay & von Hippel, 2010), and males make more charitable donations when in the presence of an attractive female (Iredale, Van Vugt, & Dunbar, 2008). Despite this past work, there is a paucity of research testing the influence of the opposite sex as it pertains to aggressive behavior. In fact, most widely accepted models for aggression do not include this variable (Anderson & Bushman, 2002). In our experimental study, we randomly assigned male and female participants to read a hypothetical scenario involving a provocation (or not) while viewing either an attractive or unattractive photograph of a member of the opposite sex before completing measures of aggressive intentions. We hypothesized that males would show higher levels of aggressive intentions when they imagined themselves in a provoking situation coupled with an attractive female photograph.

METHOD
Participants
A sample of 1,035 participants (556 male) from Mechanical Turk participated in the current study for $0.75 U.S. The mean age was 33.05 (range 18 to 75 years).

Materials
Story Scenarios. Participants were asked to imagine themselves in a hypothetical situation involving a provoking interaction between a member of the same sex.

Attractive and Non-Attractive Images. Images with the highest and lowest average attractiveness ratings for each sex were taken from FACITTY.com.

Hostile Attribution Bias (HAB). A questionnaire containing eight scenarios and various response choices measured hostile attribution bias (Lobbestael et al., 2013).

Hypothetical Aggressive Behavior. The Voodoo doll paradigm was used to measure hypothetical aggressive behavior (DeWall et al., 2013).

Procedure
All surveys were administered online. Participants completed the hostile attribution bias measure first, then received the image/provocation manipulation, followed by the hypothetical aggressive behavior measure.

RESULTS
Zero-order correlations were calculated between anger, state hostility, hostile interpretation bias, and aggressive behavior. See Table 1 for these relations.

### TABLE 1: CORRELATION MATRIX

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>----</td>
<td>.45**</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>----</td>
<td>.27**</td>
<td>.17**</td>
<td>----</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>----</td>
<td>-.02</td>
<td>-.15*</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>----</td>
<td>-.03</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>----</td>
</tr>
</tbody>
</table>

1 = Aggressive Behavior, 2 = State Hostility, 3 = HAB, 4 = Age, 5 = Anger
*p < .05, **p < .01

A 2 (provocation: yes, no) x 2 (picture: attractive, non-attractive) x 2 (sex: male, female) analysis of covariance (ANCOVA), controlling for HAB was conducted to investigate differences in hypothetical aggressive behavior. Results shown in Figures 1 and 2.

A significant three-way interaction, $F(1, 980) = 9.47, p < .01, \eta^2_p = .01$ emerged. A 2 (Provocation) x 2 (Picture) ANCOVA was conducted for each sex, controlling for HAB. For males, the two-way interaction was significant, $F(1, 980) = 5.98, p < .05$. Simple effects revealed that the effect of picture on aggression was significant for males in the provoked condition ($F(1, 980) = 6.11, p < .05, \eta^2 = 0.16$) but not for males in the unprovoked condition, $F(1, 980) = 3.69, p > .05$. The ANCOVA with female participants yielded a non-significant two-way interaction, $F(1, 980) = 1.58, p > .05$.

CONCLUSION
The current research investigated the effect of the presence of a potential mate on aggression. Results of the present study support the hypotheses. Male participants, when placed in a theoretical situation of trying to impress an attractive female, exhibited significantly higher levels of aggressive intentions towards another male following provocation by that male, than male participants who imagined interacting with a non-attractive female. As predicted, this effect was not seen for males who did not receive provocation. Results carry theoretical implications and indicate that the opposite sex is a variable which should be considered when investigating causes of human aggression.

APPENDIX: IMAGES FOR ATTRACTIVENESS MANIPULATION

Attractive
Non-Attractive

Female
Male
Female
Male