Implicit Associations, Explicit Attitudes and other Factors Surrounding the Black Dog Effect

Daniel N. Albohn, Dean R. Fischer, and Debra Vredenburg-Rudy, Ph.D.
Department of Psychology Millersville University of Pennsylvania

Abstract

Black Dog Syndrome (BDS) is a term coined by animal welfare advocates that describes the significant disadvantage black dogs experience in shelters across the country. Some theories suggest that this occurs because the public performs an "unconscious negative background check" on black dogs, assuming that a homeless black dog must be flawed and less adoptable (Leonard, 2011). BDS occurs regardless of health or temperament of the dog. While numerous anecdotal accounts support BDS, very little empirical research has addressed the phenomenon. This project sought to evaluate the implicit associations toward black dogs in a sample of college students. Participants completed two implicit association tests (black/white shapes and dogs) designed to measure reaction time for pairings of the words "good" and "bad" with "light/white" and "dark/black" pictures, respectively. Results indicate that BDS exists above and beyond that of just color preference.

Introduction

Although there has been a significant amount of anecdotal evidence claiming the validity of BDS, little empirical research has been reported (Dahl, 2008; Lepper, Kass, & Hart, 2002; Leonard, 2011). Negative associations with the color black have been pervasive throughout human history and appear to elicit similar symbolic meaning across cultures (Adams & Osgood, 1973).

There are certain evolutionary characteristics that guide the formation of primitive associations with the color black (Meier & Robinson, 2005). Negative associations with the color black have been shown to affect preferences and behavior (Williams & Rousseau, 1971; Williams, Boswell, & Best, 1975; Frank & Fisher, 1973). Their structure, function, and consequences (pp. 109-131). New York, NY US: Psychology Press.

There are several limitations that may have affected the results. 1) homogeneously diverse sample, 2) the inherent limitations of the IAT, and 3) lack of standardized pictures.

Hypotheses

1. A Black Dog Bias exists.
2. Black Dog Bias is above and beyond just color preference.

Method

Participants

• There were 102 participants. The majority of participants were female (72.5%). Racial breakdown was as follows: White 82.4%, Black or African American 9.8%, Asian 1%, Other 2.9%, and no response 3.9%. All participants were students at Millersville University of Pennsylvania.

Materials

• The IAT was used to determine the strength of implicit associations between a combination of dark or light pictures and bad or good words.
• Two different pictorial stimuli (shapes, and dogs) were used, each containing 10 black and 10 white photos.

Procedure

• Participants took the IATs in a controlled computer lab environment, or on an equal environment individually.
• Each participant took both the Shape IAT and the Dog IAT consecutively and in one sitting.
• Because the IAT takes approximately 20 minutes to complete, the number of testing trials was reduced (Smith-McClenathan, Johnson, Dovidio, & Pearson, 2006; Philips et al., 2000).

Results

There were longer reaction time scores to positive words associated with the color black and negative words associated with the color white for both the Shape and Dog IATs.

• IAT scores were calculated such that higher scores indicated stronger positive associations for Light stimuli (white shape or dog) as compared to Dark stimuli (black shape or dog).
• Table 1 presents means, standard deviations, and correlation for the Shape and Dog IAT.

Table 1. Means, Standard Deviations, and Correlation for IAT Tasks

<table>
<thead>
<tr>
<th>IAT Task</th>
<th>Mean</th>
<th>SD</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shape IAT</td>
<td>102</td>
<td>.79</td>
<td>.40</td>
</tr>
<tr>
<td>Dog IAT</td>
<td>102</td>
<td>.61</td>
<td>.46</td>
</tr>
</tbody>
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Note. ** p < .01

Discussion

• Results show that implicit color preference is related to implicit dog preference, yet a significant implicit dog preference remained over and above the contribution of color preference when color preference was set at zero in the regression model.
• One interpretation of these results is that humans have an innate fear response to the color black, especially seen in big, black dogs.
• Future research should aim to measure other implicit responses such as physiological arousal and brain activation.

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References

McLallen, M., et al., 2006).
Schnabel, K., McLallen, M., et al., 2006).
Smith-McClenathan, Johnson, Dovidio, & Pearson, 2006; Philips et al., 2000).

 figures and tables