Eye Salve for the Righteous?
Attentional Biases as Correlates of Religious Behaviors and Orientation

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Conscious thinking is affected by unconscious biases. This study aims to examine whether biases in religious attention will show any effects similar to those found by Isaacsowitz (2005) of optimism on negative and positive images, and whether those effects will correlate with measures of religious orientation given that there is a relationship between religious orientation and optimism (Sulsman, Brown, Brechterling, & Carbon, 2005).

PREVIOUS RESEARCH
ATTENTIONAL BIASES

Segerstrom (2001) found that optimists’ attention was biased toward positive stimuli, although they were not conscious of that bias. Isaacsowitz (2005) extended this finding by demonstrating that optimists generally focused their attention away from a negative visual stimulus. This suggests that unconscious processing biases can affect what information is at the focus of attention.

RELIGIOUS COGNITION

In the domain of religious cognition and behavior, Habenicht (2009) found that as the frequency of religious behaviors increases, the time required to find a change to a religious artifact in a change detection paradigm (Bensink, 2002) decreases; this suggests that religious behaviors may lead to an attentional bias towards religious objects and information in the world.

METHODOLOGY
DATA COLLECTION

Religious orientation and behavior was measured by using the Religious Orientation Scale (Batson & Schoenrade, 1991) and the Religious Behavior Scale (Habenicht, Bailey, & Bailey, 2009) respectively. We also included the Life Orientation Test (Scheier & Carver, 1985) in order to attempt to distinguish between the effects of optimism and those of religious behavior and orientation. We then used an eye tracker to measure subjects’ visual attention (sampled at 60 Hz) as they viewed pairs of positive and negative images from the International Affective Picture System (Lang, Bradley, & Cuthbert, 2008) and religious and non-religious images (photographs of stained glass windows).

EXPERIMENT 1

19 subjects viewed 24 sets of positive-negative and 12 sets of religious-non-religious images. They were told that they might need to complete a memory test and that they should memorize the images.

EXPERIMENT 2

24 subjects completed a task identical to Experiment 1, except for the addition of a prime word prior to each image which subjects categorized as religious (18 trials) or non-religious (18 trials).

RESULTS CONTINUED

Only a marginal main effect of quest religious orientation on positive bias during image viewing (ß = .029, p=.075) was found. These two main effects accounted for a marginally significant ($R^2 = .13$).

The strongest relationship between a religious bias during image viewing and a religiosity variable involved high cost religious behaviors (r=.30, p=.051). There was no effect of or interaction with prime condition (all $p>.10$). No other relationship with religious bias reached even marginal significance.

IMPLICATIONS

There was not a strong effect of religiosity (measured by behavior or orientation) on either religious biases or positivity biases in image viewing; only marginal relationships were found. By adding a priming task, we were able to replicate previous work showing a positive correlation between optimism and a positivity bias in image viewing; subjects’ attentional biases may become more apparent when faced with an attention-focused task (as opposed to a memory-focused task). Previous research has found behavior-related attentional biases with such tasks (e.g. the dot probe task in Mogg, Bradley, Field, & De Houwer, 2003).

LIMITATIONS

• lack of normed religious stimuli
• insufficient sample size relative to the size of attentional bias effects (usually 3%; about 1.3% - 2% in the current study).
• task may play a substantial role in sensitive to behavior-related attentional biases
• difficulty of measuring religiosity