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COMMENTARY

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Is God Really Watching You?  
A Response to Shariff and  
Norenzayan (2007)

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Shariff and Norenzayan (2007) recently reported in the journal *Psychological Science* that covertly priming participants with “God concepts” increased prosocial behavior regardless of self-reported religiosity. They interpreted their data as supportive of ideomotor and supernatural watcher effects, with implications discussed in the context of religion facilitating the development of cooperative societies. However, methodological choices and theoretical ambiguities call into question these interpretations and implications.

METHODOLOGICAL FLAWS

In the first study, participants were randomly assigned to either the religious-prime or no-prime condition, which was followed by the dependent measure

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of generosity. To covertly prime participants with "God concepts" a scrambled-sentence test was used. However, there seemed to be flaws in the way the procedure was implemented; specifically, it appears that an effort was not made to hide the religious meaning of all the primed words participants received (e.g., "she felt the spirit"), and some of the primed words were exclusively religious in meaning (e.g., God, sacred). To say that the prime was not conscious, care must be taken in hiding the true meaning of the concept being primed, as the researchers did with the word *divine* (i.e., "the dessert was divine"; see Bargh & Chartrand, 2000).

It could be argued that even though some of the primed words were used in a religious context, participants were not consciously aware of receiving the religious words. After all, the same religious scrambled-sentence test was used in the second study in combination with a suspicion probe. Such probes reflect a standard means of assessing awareness of priming manipulations (see Bargh & Chartrand, 2000). The problem here, however, lies in how the suspicion probe was implemented. First, when checking for awareness of a prime, it is essential to apply that probe immediately after measurement of the dependent variable. If awareness is not measured until the end of the study, as done by Shariff and Norenzayan (2007), then it is more likely that the probe is measuring memory as opposed to conscious awareness (Dixon, 1981). Second, and more important, participants were never explicitly asked, "Did you see any religious-related words in the scrambled-sentence test? If so, what were they?" This type of question is the most important to ask when using a suspicion probe called a "funnel debriefing" that is specifically designed to check for awareness of primed information (Bargh & Chartrand, 2000).

As a result, the findings of Shariff and Norenzayan (2007) do not show that the influence of the religious primes on participants' behavior occurred outside of their conscious awareness. Fortunately, religious concepts have been used as covert primes to examine prosocial behavior in previous studies not cited by Shariff and Norenzayan (see Randolph-Seng, 2007). Over the past few years we have developed a research program specifically designed to test whether covert religious primes can influence participants' behavior outside of their conscious awareness. Using research designs that avoid the problems just discussed, we have consistently found, even when using subliminal primes, that religious primes increase prosocial behavior (honesty) and that they do so without participants' conscious awareness of such influence. Furthermore, we have found that these effects are not moderated by self-reported religiosity (Randolph-Seng & Nielsen, 2007). These results are remarkably consistent with those reported by Shariff and Norenzayan (2007) yet provide more compelling evidence that concealed religious concepts influence social behavior *outside of* participants' awareness.

## THEORETICAL AMBIGUITIES

With the benefit of better controlled designs, we have shown that priming religious words can increase participant's prosocial behavior outside of their conscious awareness (Randolph-Seng & Nielsen, 2007). What are the theoretical implications? Shariff and Norenzayan frame their research as an experimental test of whether religiosity influences prosocial behavior. However, they end up appealing to the idea that religion may increase prosocial behavior through the felt presence of God. It is unclear how the research design of the study sufficiently tests either proposal. In what way does presenting participants with religious words map onto an individual's religiosity and subsequent conclusion that a supernatural agent is in the room? Rather, demonstrating that priming of religious representations leads to increased prosocial behavior is consistent with almost 20 years of research showing that priming specific representations leads to activation of certain perceptions and behaviors (for a review see Dijksterhuis, Chartrand, & Aarts, 2007). In this sense, Shariff and Norenzayan's results may be replicating more conscious components of this effect (see Moors & De Houwer, 2006).

Therefore, it is understandable why Shariff and Norenzayan would suggest ideomotor-action (perception-behavior link) as one explanation of their results. It is unclear, however, why a less parsimonious explanation was also presented as equally likely, particularly when the results seem to rule out the "supernatural watcher" explanation. For example, the religious- and secular-moral prime groups showed comparable prosocial behavior regardless of self-reported religiosity. Why would participants who do not believe in God implicitly perceive God to be watching them when primed with religious words? Furthermore, if the enhanced prosocial behavior is due to a "supernatural watcher," why would being primed with moral secular words such as *police* and *civic* lead to the same levels of prosocial behavior when the prime contains no reference to God?

Based on Shariff and Norenzayan's (2007) results (and our own), we conclude that it is premature to attribute the findings to something special about activating specifically religious concepts. The more parsimonious explanation is that priming words (whether religious, secular-moral, or otherwise) that are mentally associated with prosocial perceptions and behavior lead to such behavior simply because of that mental association. In this way, it is not religion or the perceived presence of some supernatural agent that may have led to the origins of civilization, but rather the functional pairing of cooperative cognitive ideals with specific environmental contexts (see Bargh, 2004). Nonetheless, we do agree that appropriately applying automaticity research methods to the scientific study of the psychology of religion will provide greater understanding of religion's impact on individuals and society.

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## REFERENCES

- Bargh, J. A. (2004). Being here now: Is consciousness necessary for human freedom? In J. Greenberg, S. L. Koole, & T. Pyszczynski (Eds.), *Handbook of experimental existential psychology* (pp. 385–396). New York: Guilford.
- Bargh, J. A., & Chartrand, T. L. (2000). The mind in the middle: A practical guild to priming and automaticity research. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (pp. 253–285). New York: Cambridge University Press.
- Dijksterhuis, A., Chartrand, T. L., & Aarts, H. (2007). Effects of priming and perception on social behavior and goal pursuit. In J. A. Bargh (Ed.), *Social psychology and the unconscious: The automaticity of higher mental processes* (pp. 51–131). New York: Psychology Press.
- Dixon, N. F. (1981). *Preconscious processing*. New York: Wiley.
- Moors, A., & De Houwer, J. (2006). Automaticity: A theoretical and conceptual analysis. *Psychological Bulletin*, *132*, 297–326.
- Randolph-Seng, B. (2007). The automatic consequences of religious priming. *Journal of Dissertation*, *1*. Retrieved July 7, 2007, from <http://www.scientificjournals.org/journals2007/articles/1170.pdf>
- Randolph-Seng, B., & Nielsen, M. E. (2007). Honesty: One effect of primed religious representations. *The International Journal for the Psychology of Religion*, *17*, 303–315.
- Shariff, A. F., & Norenzayan, A. (2007). God is watching you: Priming God concepts increases prosocial behavior in an anonymous economic game. *Psychological Science*, *18*, 803–809.