between Swedish and American cultures, it would be interesting to further test this hypothesis by comparing the results in Sweden and the United States with a population drawn more from the openly mystical contexts found in some African or aboriginal cultures.

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Dr. Borg and Colleagues Reply

TO THE EDITOR: We appreciate that Dr. Hall and colleagues draw attention to the problem of defining the concepts of "spirituality" and "religion." Several multidimensional or pluralistic definition systems of religion have indeed been proposed over the years. However, none of them offers a perfect solution to the need of operational tools in research on a possible biological underpinning of religious and spiritual behavior.

The authors criticize our article for using the terms "religion" and "spirituality" interchangeably. However, we did not use the concept "religion" in the article. Rather, the concept "religious behavior," which is operationally defined in the literature (1), denotes cognitive and emotional behavior associated with (the individual's relationship to their) religious beliefs. The term "spirituality" has been used in a wider context, including internal, subjective experiences, and has not been consistently defined by operational criteria. It is worth noting that the concept of spirituality is not necessarily linked to organized religion.

"Religious behavior" and "spirituality" are both covered by the personality subscale of the Spiritual Acceptance Scale, which was used in our study. The Spiritual Acceptance Scale consists of 13 items that include cognitive affirmation and values as well as subjective experiences of mystical quality. Thus, the definition of religion at a sociocultural level, as suggested by Dr. Hall and colleagues, is not covered by the scale used in our study and belongs to a different discussion.

Another part of Dr. Hall and colleagues' criticism is their interpretation that aspects of mystical experiences can be mediated by the central serotonin system. We do not suggest that the serotonin system per se mediates mystical experiences but instead may act as a sensory filter (2). Low serotonin 5-HT_{1A} receptor binding potential may be associated with a low filter function, thus paving the way for sensory stimuli otherwise not experienced. The more narrow focus on mystical experiences in this part of the discussion in our article (pp. 1967–1968) was given by comparisons made with pharmacological mechanisms causing similar experiences in man.

Finally, we agree with Dr. Hall and colleagues that it would be interesting to repeat this study in different populations. Epidemiological studies provide support for the view that religious behavior (in a more narrow sense) and spirituality (in a wider sense) are influenced by both genetic and environmental factors (3, 4). Given the previously demonstrated genetic contribution to religious behavior and spirituality, it is a promising strategy to use interindividual variability in neuroreceptor binding as a tool to approach the multifaceted question of why people vary in spiritual zeal and also within the same religious belief system.

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Conflict-of-Interest Charge

TO THE EDITOR: In the review by Robert T. Rubin, M.D., Ph.D (1), of *Psychoneuroendocrinology: The Scientific Basis of Clinical Practice* (2), he charged that I, a coeditor of the book, have an undisclosed conflict of interest: "Also troublesome is Rothschild's undisclosed financial interest in Corcept Therapeutics, which is attempting to establish mifepristone as an antidepressant." There are only three sentences in this 588-page book regarding studies of mifepristone for the treatment of psychotic depression:

> Another interesting strategy is the progesterone receptor antagonist mifepristone (RU 486), which at high concentrations is an effective antagonist of glucocorticoid action in vivo and in vitro (Lamberts et al. 1984; Proux-Ferland et al. 1982). Mifepristone has been observed to be useful in rapidly reversing psychotic depression secondary to Cushing's syndrome (Nieman et al. 1985; Van Der Lely et al. 1991) and in patients with psychotic major depression (Belanoff et al. 2001; Rothschild and Belanoff 2000). Studies of mifepristone for the treatment of psychotic major depression using a double-blind, placebo-controlled paradigm are currently in progress at our center and several others across the country.

To set the record straight, I do not now and never have owned stock in Corcept Therapeutics. I served briefly as a