

EDITOR PREFACE

METHODOLOGY IN THE COGNITIVE SCIENCE OF RELIGION

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Welcome to this double issue of the *Journal for the Cognitive Science of Religion* on the theme of methodology. The cognitive science of religion (CSR) does not have its own methodology, and yet from the very beginnings of the discipline, methodology has defined it against and/or in relation to the general study of religion in the humanities. CSR researchers have been attempting to transform the study of religion into a scientific endeavor. This early attempt by CSR founders was defined against the postmodern relativisms in religious studies during the 1990s. Today, it is still an ongoing ideal, although not necessarily against any particular subdiscipline. CSR scholars consider their research to be a supplement to other disciplines focused on the study of religion, and they are being recognized as such by scholars in those other disciplines.

CSR scholars are using a wide range of methodologies, borrowing heavily of course from the cognitive sciences and experimental psychology, but also from biology, archaeology, history, philosophy, linguistics, the social and statistical sciences, neurosciences, and anthropology. This multi-disciplinarity defines the cognitive science of religion. It is simultaneously its strength and its weakness. The weakness is twofold: 1) no one person can master such a wide range of methods, and 2) scholars are subject to all of the problems and uncertainties that these methods entail. The first weakness is countered by hard work and truly interdisciplinary teams. The second by continual reflections on and debates about the methodologies being used. In fact, no CSR

study worth its name can rely on only one methodology. Triangulation is standard, but often even more approaches are used.

The *JCSR* has throughout its brief history showcased a wide range of methodologies and has also encouraged articles that specifically deal with methodology (see, for instance, the special issue on experimental research of religion in volume 1, no. 2, 2013). This issue focuses especially on methodology. Since our readers come from different fields and disciplines, we cannot assume that everyone is familiar with experimental, ethnographic, statistical, or anthropological methods. Thus, readers might find articles in this issue that deal with well-known discussions in their discipline or field, while it will be news to other readers. We hope, however, that everyone will learn more about those issues and that they will also gain insight on methods unfamiliar to them. We hope to learn from our neighbors and to inspire a greater methodological awareness.

The articles

The first three articles are by psychologists concerning crucial methodological issues in the psychology of religion and in psychology in general. The section opens with an invited essay by psychologist of religion Benjamin Beit-Hallahmi, who has been encouraging psychologists and other scholars interested in psychology and religion to join in what he calls the new psychology of religion or the new social science of religion, acknowledging thereby contributions from a wide range of sciences and disciplines, including the cognitive science of religion. In his opinion, in the psychological study of religion, and we might add any other study of religion, “disciplinary boundaries and labels may be ignored on the road to better ideas,” because “the phenomena we want to investigate do not honor disciplinary boundaries, and academic curiosity no longer follows them” (Beit-Hallahmi 2015, ix). In his invited essay, Beit-Hallahmi provides a selected overview of experimentation in psychology and raises several challenges towards CSR notions. He furthermore wishes to encourage psychologists to engage in more cross-cultural experimentation.

In the article by psychologists Shoko Watanabe and Sean M. Laurent, the authors provide a critical review of priming methodologies in social psychology and ask whether religious priming effects are replicable and observable across a wide range of spiritual and religious beliefs. Despite methodological shortcomings, the authors provide suggestions on how to move forward. Psychologists Patty Van Cappellen and Megan E. Edwards draw attention to a neglected aspect of religious worship, namely, embodiment. This neglect, although changing now in a number of disciplines – less so in the cognitive science of religion – needs to be redressed. The authors review embodiment

theory and empirical evidence on how the body and body postures influence emotions, thoughts, and decision-making. They provide a typology of postures in religious practices and conclude that the psychosocial effects of religious practice are in the body as well as the mind and brain.

The next two articles by CSR scholars argue for the need to supplement or even replace the exclusive use of WEIRD participants (Western, Educated, Industrialized, Rich, and Democratic, see Henrich *et al.* 2010 and Henrich 2020). In their article “Gone WILD, Not WEIRD,” Martha Newson, Michael Buhrmeister, Dimitris Xygalatas, and Harvey Whitehouse argue that CSR needs to stop privileging WEIRD populations and conduct WILD (Worldwide, In Situ, Local, and Diverse) research. They conducted a survey of leading psychology journals and cognitive science of religion journals, which demonstrates that the CSR journals have a larger percentage of studies outside of Europe and North America than psychology journals, but much more work needs to be done by conducting experiments outside the lab and with heterogeneous populations. Addressing the same problem, CSR scholars Hugh Daniel Turpin and Mark Stanford demonstrate how to practice a cognitively informed ethnography by describing the weaknesses and strengths of using mixed methods in two fieldwork studies, one among Burmese Buddhists and the other among Catholics in Ireland. In an exemplary manner, they show how experimental design and ecologically valid settings influence and counter-influence each other, raising new questions to be answered. They outline four reasons for mixing qualitative and quantitative methods and how to resolve their inherent tensions.

The next two articles examine the problems of open science and the replication crisis. CSR scholars Christopher Kavanagh and Rohan Kapitany describe in detail what open science is about and how it increases transparency and rigor in research. They discuss both the benefits and the limitations of preregistration, preprints, and open science, and address common concerns and misconceptions on these practices. The new field of open science is rapidly developing, so this article is a snapshot of the scholarly discourse with instructive examples. They show how the current debate between Whitehouse and colleagues, on the one hand, and Slingerland and colleagues, on the other, concerning their findings on social complexity and moralizing gods has functioned through the use of open science.

Psychologists Suzanne Hoogeveen and Michiel van Elk encourage open science and discuss in their article the current replication crisis in developmental psychology and the cognitive science of religion. They highlight the outcomes of replication research on empirical CSR findings and suggest avenues for future replication studies focusing on neuroscience, developmental

psychology, and qualitative research. The description of failed replications of CSR and other psychological findings is highly instructive and should give pause for thought. This problem is more than just a question of methods. It is also a call for CSR researchers to conduct replication studies, which is, after all, crucial to science. So far, none of the foundational theories have been definitively replicated. The article provides a “replication script” on how to select, conduct, and organize replication research.

The final article by CSR scholars Justin Lane and F. LeRon Shults examines the pros and cons of simulation studies. They provide an overview of the most common methods used in computer modelling and simulation (system dynamics, agent-based, and artificial neural network) with case examples, such as game theory experiments, and how to proceed in future research. Despite the challenges of computational modelling, they encourage CSR scholars to engage in the growing computational science of religion.

Announcements

In the interests of increased transparency and of drawing attention to previous study designs that other researchers can improve upon, the *JCSR* encourages authors to submit their “file drawer” manuscripts as short reports (2,500 words) of a methodological nature. By this is meant unpublished findings, null-findings, research designs that did not work out as expected, research projects that were not completed to publication, etc. The reports should describe the studies conducted, and/or online available complete study designs, all relevant limitations and suggestions for future improvements, and should include a table of summary statistics, supplemented by links to pre-registration materials and/or publicly available data. To ensure credibility, the peer review process for these reports will follow *JCSR* protocols, but would also include an evaluation of whether all details, limitations, and recommendations are described in the report.

The journal has also developed a new policy on statistics. In the event that an article includes statistics, it is strongly recommended that statistical analyses are accompanied by effect sizes, 95% confidence intervals, and exact *p*-values. Where relevant/appropriate, power analyses are encouraged, as are explanations regarding data exclusion (e.g., outliers).

Finally, beginning with volume 7, the *JCSR* will be using the American Psychological Association citation format (APA 7th edition, 2020).

The above-mentioned information and formatting style are described in the *JCSR* “Guidelines for Contributors” at <https://journal.equinoxpub.com/JCSR/information/authors>.

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