Copyright © 2022 Taylor & Francis. This is an Accepted Manuscript of an article published by Taylor & Francis in Religion, Brain and Behavior on 19 Oct 2022, available at: https://www.tandfonline.com/10.1080/2153599X.2022.2127212. It is made available on this institutional repository under a Creative Commons Attribution-NonCommercial 4.0 International License (https://creativecommons.org/licenses/by-nc/4.0/), see: https://authorservices.taylorandfrancis.com/research-impact/sharing-versions-of-journal-articles/.

## Guest editorial: Disentangling the relationships between religion and fertility

Published in *Religion, Brain and Behavior*, 2022, vol 12(4): 343-346 https://doi.org/10.1080/2153599X.2022.2127212

Laure Spake, Anushé Hassan, Rebecca Sear, Mary K. Shenk, Richard Sosis, John H. Shaver

In this issue of *Religion, Brain & Behavior*, scholars from multiple disciplines offer comments on Jenkins' *Fertility and Faith* (Jenkins, 2020). The debate, and Jenkins' response to the commentaries, contribute to moving scholarship forward in an often-neglected area in the scientific study of religion. The book tackles an extensive literature, synthesizing work on several topics: drivers of secularization, drivers of fertility decline, the relationship between religion and fertility, and whether these relationships are consistent across countries and religious communities. Through this synthesis, Jenkins argues that religiosity and fertility are tightly linked, rising and falling in tandem through time and across the world.

The commentary authors highlight several questions that remain unsolved by Jenkins' synthesis. Voas (2022), for example, questions Jenkins' lack of favor for one mechanism over another, suggesting that changes in both religiosity and fertility may affect a change in feedback loops. Potentially, Jenkins' non-preference for a single mechanism is because he does not employ a strong theoretical framework to explain the relationship between religiosity and fertility, as Lynch and co-authors argue (2022). This is complicated by the range of data available to study this question. Globally, analyses of religiosity and fertility have to deal with the problem of scales of analysis, balancing studies at individual versus country-level data, as Peri-Rotem (2022) highlights. Focusing on global trends to the exclusion of individual-level data, as well as using a lens which prioritises a Western and present-centred viewpoint, has the potential to erase local and temporal variation in the relationship between family formation and religion both in Western and global settings (Brown, 2022; Shaver et al., 2022; Walters & Sear, 2022).

Our own work employs evolutionary theory and in-depth fieldwork to investigate the dynamics between religion and fertility. In the remainder of this editorial, we describe our efforts as part of the Evolutionary Demography of Religion project, which was designed to further understand the links between religiosity, fertility, and child success. Three of the commentaries on *Fertility and Faith* were contributed by members of the Evolutionary Demography of Religion team, and here we give a general description of this project. In doing so, we hope to explain how the project will address some of the shortcomings of *Fertility and Faith* noted by commentators many of which also apply to the larger literature on this topic.

The project's central hypothesis is that religious systems promote collaboration between individuals, thus facilitating greater access to social support systems among more religious women and/or families (e.g., help with childcare). The support provided to women and families can help offset the costs of reproduction, resulting in higher fertility compared their secular counterparts (Shaver, 2017). Moreover, differences in fertility between religious groups are expected to vary as a result of religious groups' ability to overcome cooperative dilemmas that themselves vary across socioecological contexts. To evaluate these hypotheses, our mixed-methods project combines anthropological and demographic methods, conducting surveys and focus group discussions across five study locations (India, Bangladesh, Malawi, The Gambia, and the United States) in partnership with local institutions including the International Center for Diarrheal Disease Research, Bangladesh (icdrr,b) in Bangladesh; the Society for Health and Demographic Surveillance in India; the West Kiang HDSS, based at the Medical Research

Council Unit The Gambia (MRCG@LSHTM); the Malawi Epidemiological and Intervention Research Unit (MEIRU) in Malawi; and the Pennsylvania State University Survey Research Center (SRC) in the United States.

One of the strengths of Jenkins' work is the quantity and range of data examined; however, generalized narratives do not lend themselves to understanding the unique dynamics of religious systems in their cultural context. Contrastingly, the Evolutionary Demography of Religion project was explicitly designed to explore, incorporate, and collect data on local understandings of religiosity and family formation. For each study location, we began with ethnographic work including focus group discussions to better understand: how religiosity is construed, performed, and signaled locally; what values are held around family and family planning; and what types of cooperation, including childcare, is exchanged amongst individuals in the community. We used this information to adapt standard questionnaires to each context, using locally relevant questions to collect information on religiosity, several dimensions of fertility (e.g., marriage and birth histories, future fertility intentions, fertility ideals), parental and extraparental investment in children, and collaboration between individuals. These questionnaires were administered to between 400 and 1000 women and up to 700 of their husbands in each country. We followed up these questionnaires with a second round of focus group discussions driven by research questions that were better suited to open ended discussion. These covered several topics, including the sources of information (such as religious teachings, medical advice, non-governmental organizations) individuals consider when making family-related decisions. This research design introduces important community-specific information that is lost with country-level analyses.

The approach taken by the Evolutionary Demography of Religion project addresses several remaining gaps raised by the commentators in this issue. The project acts at multiple scales of analysis by taking a cross-cultural approach, enabling us to examine the impact of religiosity both at the individual and community level. Detailed information collected on religious behavior, cooperation, and fertility will enable us to examine the ethnographically grounded measures of religiosity that correlate with fertility and examine potential causal frameworks to link the two. The qualitative component of the project allows us to contextualize our findings and report on the importance that men and women in each study location place on religiosity when making reproductive decisions. Lastly, we have chosen to work in communities that have differing levels of religiosity, fertility, market integration (i.e. local experiences of economic development and integration into larger market systems) and religious groups with minority/majority status so that we can better understand how relationships between these indicators vary across different types of societies.

While we are now just starting data analysis, we anticipate that results from this study will contribute to aspects of the study of religiosity and fertility that scholars writing in this book symposium have identified as still missing – especially theory building, causality, and working at multiple scales of analysis. In preparation for fieldwork, we have conducted several analyses regarding religiosity, fertility, and related topics. Our findings suggest that: religiosity is associated with emotional closeness to relatives (Lynch et al., in press) and changes in sex differences in social networks (Lynch et al., in prep a ); that religiosity is associated with receiving more alloparental support both in the form of physical childcare (Shaver et al., 2019, 2020), and in the form of household help (Spake et al. in prep); that religious minority/majority status impacts group differences in fertility (Naz et al., in prep); and that education causally drives non-religiosity, other analyses from this project have examined the following topics: the impact of the COVID-19 pandemic on maternal social networks (Hassan et al., in review); the

impact of market integration on marriage pathways (Schaffnit et al., in review) and social networks (Lynch et al., in prep b); the conditions under which alloparental care emerges (Weitzel et al., in prep); and maternal support networks (Spake et al., 2021; Page et al., in press). We hope that our findings will be of interest to readers of this journal. More information and updates about our project can be found on our website: https://www.evolutionarydemographyofreligion.org/

## References

- Brown, C. G. (2022). The agency of women in secularization. *Religion, Brain & Behavior*, 1–6. https://doi.org/10.1080/2153599X.2021.2023616
- Hassan, A., Spake, L., Shaver, J.H., Shenk, M.K., Sosis, R., & Sear, R. In review.

Nuclearization of mothers' social support networks and childcare provision in the UK and

the USA during the COVID-19 pandemic.

Jenkins, P. (2020). Fertility and Faith. Baylor University Press.

https://www.baylorpress.com/9781481311311/fertility-and-faith

- Lynch, R., Shenk, M. K., Shaver, J. H., & Spake, L. (2022). Fertility and faith: Insights from human behavioral ecology, evolutionary psychology, and life history theory. *Religion, Brain & Behavior, 0*(0), 1–8. https://doi.org/10.1080/2153599X.2021.2023617
- Lynch, R., Schaffnit, S., Sear, R., Sosis, R., Shaver, J., Alam, N. Blumenfield, T., Mattison, S. and Shenk M. In press. More religious women have larger and more kin dense social networks in a country undergoing rapid market integration. Nature Scientific Reports.
- Lynch, R., Schaffnit, S., Spake, L., Hassan, A., Sear, R., Sosis, R., Shaver, J., Alam, N. Blumenfield, T., Mattison, S. and Shenk M. In prep A. Religion exacerbates sex differences in social networks in Bangladesh.
- Lynch, R., Schaffnit, S., Spake, L., Hassan, A. Sear, R., Sosis, R., Shaver, J., Alam, N.
  Blumenfield, T., Mattison, S. and Shenk M. In prep B.Sex differences in social networks:
  Men have larger networks with more non-kin than women and these differences are exacerbated by market integration in rural Bangladesh.

- Naz, S., Shaver, J., Sosis, R., Sear, R., Shenk, M. In prep. Minority-majority religious group differences in fertility: The impact of level of minority status in South Asia. For: Population and Development Review.
- Page, A. E., Migliano, A., Smith, D., Viguier, S., Dyble, M., & Hassan, A. In press.
  Sedentarisation and maternal childcare networks: role of risk, gender and demography.
  Philosophical Transactions of the Royal Society B.
- Peri-Rotem, N. (2022). Global fertility and the future of religion: Addressing empirical and theoretical challenges. *Religion, Brain & Behavior*, 1–4. https://doi.org/10.1080/2153599X.2021.2023620
- Schaffnit, S.B., Page, A.E., Lynch, R., Spake, L., Sear, R., Sosis, R., Shaver, J., Alam, N., Towner, M., & Shenk, M. In review. Market integration enables novel pathways to marital arrangements in Matlab, Bangladesh.
- Shaver, J. H. (2017). Why and how do religious individuals, and some religious groups, achieve higher relative fertility. *Religion, Brain & Behavior*, *7*, 324–327. https://doi.org/10.1080/2153599X.2016.1249920
- Shaver, J. H., Power, E. A., Purzycki, B. G., Watts, J., Sear, R., Shenk, M. K., Sosis, R., & Bulbulia, J. A. (2020). Church attendance and alloparenting: An analysis of fertility, social support and child development among English mothers. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 375(1805), 20190428. https://doi.org/10.1098/rstb.2019.0428
- Shaver, J. H., Sibley, C., Sosis, R., Galbraith, D., & Bulbulia, J. (2019). Alloparenting and religious fertility: A test of the religious alloparenting hypothesis. *Evolution and Human Behavior*, 40, 315–324. https://doi.org/10.1016/j.evolhumbehav.2019.01.004
- Shaver, J. H., Spake, L., Lynch, R., & Shenk, M. K. (2022). Faith and fertility in evolutionary perspective. *Religion, Brain & Behavior*, 0(0), 1–9. https://doi.org/10.1080/2153599X.2021.2023618

- Spake, L., Schaffnit, S. B., Sear, R., Shenk, M. K., Sosis, R., & Shaver, J. H. (2021). Mother's Partnership Status and Allomothering Networks in the United Kingdom and United States. *Social Sciences*, *10*(5), 182. https://doi.org/10.3390/socsci10050182
- Spake L., Schaffnit, S.B., Page, A.E., Hassan, A., Lynch, R., Watts, J., Sosis, R., Sear, R., Shenk, M.K., & Shaver, J. In prep. Religious women receive more allomaternal support in two low-fertility countries.
- Walters, S., & Sear, R. (2022). Fertility and faith: The danger of a grand narrative. *Religion, Brain & Behavior*, 1–7. https://doi.org/10.1080/2153599X.2021.2023621
- Weitzel, E.M., Wilson, K.M., Sear, R., Shaver, J.H., Shenk, M.K., & Sosis, R. In prep. Modeling the conditions of adaptive allocare.