EDITORIAL

Introduction to Special Issue: Diverse Disciplinary Approaches to the Study of Adolescent Religious and Spiritual Development

Sam A. Hardy1 · Jenae M. Nelson1

Accepted: 3 June 2021 / Published online: 9 June 2021
© The Author(s), under exclusive licence to Springer Nature Switzerland AG 2021

Abstract
This editorial introduces the special issue on Diverse Disciplinary Approaches to the Study of Adolescent Religious and Spiritual Development. First, a case is made for the importance of the special issue, focusing on the utility of diverse approaches in providing a richer understanding of the phenomena of interest. Second, a summary is given of the six target pieces in the special issue. These target articles were written by scholars from six disciplines doing work relevant to adolescent religious and spiritual development: developmental psychology, sociology, cultural psychology, social and personality psychology, cognitive psychology, and developmental neuroscience. It is hoped that this special issue strengthens the quality of scholarship in this research area, encourages interdisciplinary work, and enriches our understanding of adolescent religious and spiritual development.

Introduction
Over the last few decades, the field has increasingly acknowledged religiousness and spirituality as an important domain of adolescent development, and research on the area has expanded faster than average (Hardy et al., 2019). At this point, enough evidence has accumulated to pinpoint some key trends. For example, religiousness and spirituality tend to be adaptive for most youth, depending on the context and the individual (Hardy et al., 2019). Additionally, religiousness and spirituality tend to decline across adolescence, and adolescence is one of the most likely times when youth leave religion (Hardy & Longo, 2020). Now is the time to move toward a deeper understanding of the processes and dynamics involved in religious and spiritual development, as well as predictors and outcomes of religiousness and spirituality, and the various ways in which youth experience religion and spirituality. This requires greater creativity and sophistication in our theories and methods. Taking a multidisciplinary approach can inspire and guide such efforts. Thus, in the spring of 2020, we held an online conference on Diverse Approaches to the Study of Adolescent Religious and Spiritual Development1 (funded by the John Templeton Foundation). Seven speakers from different disciplines presented how their discipline approaches the study of adolescent religious and spiritual development. The discussions were so enlightening that we decided to turn the conference into a special issue. Hence, the purpose of this special issue is to articulate the ways in which different disciplines approach theory and research on adolescent religious and spiritual development and to provide recommendations for how scholars can improve their work in this area by using the tools from these disciplines. Here we will expand upon the purpose of the special issue, briefly summarize the six2 articles comprising the special issue, and end with some concluding comments.

Multidisciplinary Scholarship: The Whole Elephant
Development paradigms such as the process-relational paradigm advocate for abandoning Cartesian, reductionist conceptions of development and instead propose that the study

---

1 This was to be a pre-conference for the Society for Research on Adolescence biennial meeting. That meeting was cancelled due to the Covid-19 pandemic, but we still held the pre-conference online. The talks and posters are posted here: https://osf.io/meetings/SRAPr eARSD/.

2 One of the seven pre-conference speakers did not contribute to this special issue, resulting in only six articles.
of development requires the integration of multiple levels of analysis (Overton, 2015). Contextualism or the embeddedness of an individual is a cardinal proposition of developmental science (Baltes, 1987). The developmental paradigm acknowledges that human ontogeny is a complex, multifaceted, and bi-directional dynamic process that occurs within a layered ecological system (Bronfenbrenner, 1992; Lerner et al., 2013). Investigating specific domains of ontogeny, especially nebulous domains such as religious development, requires a multidisciplinary approach to adequately capture the phenomena at different levels of organization. In fact, life-span theorists assert that single-discipline perspectives paint deficient pictures of development (Baltes, 1987).

The inadequacies of a unidimensional phenomenological explanation are aptly illustrated by the Hindu fable of six blind men and an elephant (Saxe, 1872). In an effort to learn more about the elephant, the blind men reach out to touch it from where they stand. Limited by their lack of sight, they only feel the portion of the elephant within their reach (the husk, tail, side, trunk, etc.). When the blind men describe what they observe, their descriptions of the elephant were vastly different—yet each contained a description of the truth. Each observer held a piece of the truth but it was only the combined observations that provide an accurate description of the elephant. As with this story, scholars are limited in their scope of what they can feasibly observe, based largely on the theories of methods of their discipline. It is only when the disparate observations are compiled that an accurate picture of a phenomenon appears. Each researcher is like one of the blind men—only grasping a portion of the truth—limited by theory, operationalization, measurement, methodology, and bias. Hence, multiple perspectives across disciplines are required to piece together a more accurate description of the elephant as a whole. This theoretical ideal is widely accepted by developmentalists yet rarely practiced in scholarship. Therefore, it is the purpose of this special section to provide multiple perspectives on the development of religiosity and spirituality in adolescence in anticipation that triangulation will uncover more of the conceptual elephant (Noble & Heale, 2019).

A multidisciplinary perspective has several practical advantages beyond advancing the credibility of research via converging perspectives. First, multidisciplinary research also diminishes ethnocentrism (Crivelli et al., 2016), promotes innovation (Disis & Slattery, 2010) and problem-solving (Proctor, 2019), and provides practical applications to real-world problems by combining expertise across disciplines (Holmes et al., 2020). Second, multidisciplinary research is more efficient, as scholars across areas can reduce redundant effort wasted trying to theorize about or study the same constructs. Rather, we can all benefit from what others have learned already. Third, researchers themselves benefit from interdisciplinary collaboration. Multidisciplinary research enables scholars to learn novel research techniques and prevent paradigm stagnation (Sternberg & Grigorenko, 2001). Thus, developmental scientists have much to gain from the integration of other sub-discipline’s perspectives, expertise, and methodologies.

Specifically, this special section combines the perspectives of developmental psychology with those of cultural, social/personality, and cognitive psychology, as well as sociology and developmental neuroscience. Each discipline brings to the table theories, methods, and research foci. The unification of these diverse disciplines provides multiple levels of analysis from which to study religious and spiritual development and utilizes the strengths of each area. While this special section focuses on religious and spiritual development in adolescence, the goal is to provide an application of the developmental scientist’s multi-disciplinary ideal that can be broadly applied to other areas of adolescent development.

**Six Disciplinary Approaches**

Much of the research on religious and spiritual development has come out of developmental psychology and sociology, so those two disciplines will be presented first. But a fair amount of work relevant to the topic has also come out of cultural psychology, as well as social and personality psychology, so they will be presented next. The last two disciplines (cognitive psychology and developmental neuroscience) seem relevant to religious and spiritual development but unfortunately have so far produced little research on the topic. Scholars from these six disciplines were asked to discuss the theories and methods from their discipline that are being or could be used to study adolescent religious and spiritual development.

**Developmental Psychology**

Developmental psychologists have conducted much of the research on adolescent religious and spiritual development, and written many of the review articles and book chapters summarizing the area (e.g., Hardy et al., 2019; King & Boyatzis, 2015; King et al., 2013). The study of religious and spiritual development has gained momentum in developmental psychology in part due to the rise of the positive youth development movement (e.g., King et al., 2011). Grounded in Bronfenbrenner’s (1992) ecological theory, developmental psychology seeks to at least be cognizant of the whole elephant, per the analogy above. As such, in their article in this special issue, King, Hardy, and Noe present relational developmental systems metatheory (Lerner et al., 2015), a contemporary extension of ecological theory, as a theoretical framework for the study of adolescent religious and spiritual development.
development. They also discuss how developmental psychology excels in developmental methods, such as longitudinal design, targeted at the study of developmental change, and outline the types of research questions that can be examined with such methods. One challenge is the pragmatics of designing developmental methods that do justice to the complexity of developmental theory. The authors provide recommendations for doing so that can strengthen research in developmental psychology and the other disciplines.

**Sociology**

Sociology has also been a major player in research on adolescent religious and spiritual development. They borrow heavily from theories in developmental psychology, such as Bronfenbrenner’s (1992) ecological theory. As the name “sociology” suggests, they focus on the role of various levels of social context in religious development. One major contribution of sociology has been providing the field with longitudinal data on religiousness. Religion variables are available in most prominent nationally-representative, longitudinal sociological datasets (e.g., National Longitudinal Survey of Youth, NLSY; National Longitudinal Study of Adolescent to Adult Health, Add Health). Further, sociologists gave us the first-ever such study focused on religious development—the National Study of Youth and Religion (NSYR; Smith & Denton, 2005). Sociologists also make frequent use of mixed-methods, as is in the NSYR. Thus, they can portray the richness of experiences with qualitative data, as well as generalizable trends with the quantitative data. Pearce and Hayward give us a flavor for this in their article in this special issue, and provide recommendations for how scholars across the disciplines can leverage sociological theory and methods to improve their research on adolescent religious and spiritual development.

**Cultural Psychology**

Cultural psychology, more than any other discipline in this special issue, appreciates the role of distal social contexts, such as culture and religion. Further, the theories and methods of cultural psychology specialize in capturing the richness and complexity of human experiences like religion and spirituality (Heine, 2020). Indeed, scholars within cultural psychology have produced some poignant research on adolescent religious and spiritual development, broadening our focus beyond the U.S. and exposing various experiences across cultures. This work also points to the intersections of culture and religion, and ways in which they are often inseparable. Jensen’s article in this special issue, makes a strong case for taking culture into consideration when studying religiosity and spirituality, gives us a feel for what we can learn from doing so, and outlines implications for developmental theory and method. Researchers across disciplines will benefit from a cultural psychological perspective.

**Social and Personality Psychology**

Social and personality psychology are distinct but allied sub-disciplines of psychology. Social psychology emphasizes the role of immediate social situations in predicting outcomes, while personality psychology emphasizes individual differences. Social psychology focuses almost exclusively on adult functioning, while personality psychology looks at personality functioning during different life phases, as well as personality development processes. While less work on adolescent religious and spiritual development has emerged from these two disciplines compared to the three discussed above, they still have much to offer this research area. Social and personality psychology bring novel theories, such as New Big Five Theory (McAdams & Pals, 2006), and novel methods, such as experiments and experience sampling, that have less frequently been applied to research on adolescent religious and spiritual development. Schnitker’s article for this special issue, shows us how such theories and methods can bring a fresh look to this research area, bringing greater understanding, and expanding the range of research questions.

**Developmental Neuroscience**

Over the last few decades cognitive psychologists have gained interest in religion as part of an emerging interdisciplinary field called the cognitive science of religion (Barrett, 2000). They take theories and methods for studying human cognition and apply them specifically to religious cognitions, as well as how such cognitions relate to religious affect and behavior. For example, they seek to understand how people think about the supernatural world and supernatural agents (e.g., Heiphetz et al., 2016). Unfortunately, most of this work has focused on children and adults. Heiphetz and Nakkawita’s article for this special issue reviews the existing work and extrapolates from it a cognitive framework for the study of adolescent religious and spiritual development. Given important gains in cognitive development across adolescence (Moshman, 2011), it seems critical for researchers to consider the role of cognition in this domain of development across this phase of life.
as a lot of important neurological changes happen during this phase of life, and such changes are interconnected with social, affective, and cognitive functioning (Galván, 2017). As such, adolescent religious and spiritual development are grounded in neurological development. Unfortunately, very few scholars have made these connections. In their article for this special issue, Immordino-Yang and Riveros give an overview of developmental neuroscience and point to the way forward in studying the neuroscience of adolescent religious and spiritual development. As part of this, they demonstrate how neuroscience can indeed be multidisciplinary, viewing biology as inextricably embedded in the social world.

Conclusion

The purpose of this special issue is to present the ways in which different disciplines approach the study of adolescent religious and spiritual development and to provide recommendations for multidisciplinary work in the future. The articles in this special issue are written by scholars in six disciplines relevant to adolescent religious and spiritual development. These scholars share the methodological and theoretical strengths of their disciplines in studying this phenomenon as well as pave a new path for going forward. We hope reading these articles will broaden the minds of researchers across the disciplines, yield a richer view of the phenomenon of interest, lead to novel research questions, and provide researchers with an expanded tool kit of theories and methods with which to approach the study of adolescent religious and spiritual development. More generally, we hope this helps move the field forward in innovative and productive ways.

Declarations

Conflict of interest  The authors declare that they have no conflict of interest.

References

Baltes, P. B. (1987). Theoretical propositions of life-span developmental psychology: On the dynamics between growth and decline. Developmental Psychology, 23(5), 611–626. https://doi.org/10.1037/0012-1649.23.5.611
Barrett, J. L. (2000). Exploring the natural foundations of religion. Trends in Cognitive Sciences, 4(1), 29–34. https://doi.org/10.1016/S1364-6613(99)01419-9
Bronfenbrenner, U. (1992). Ecological systems theory. In R. Vasta & R. Vasta (Eds.), Six theories of child development: Revised formulations and current issues (pp. 187–249). London: Jessica Kingsley Publishers.

\textcopyright Springer

Crivelli, C., Jarillo, S., & Fridlund, A. J. (2016). A multidisciplinary approach to research in small-scale societies: studying emotions and facial expressions in the field. Frontiers in Psychology. https://doi.org/10.3389/fpsyg.2016.01073
Disis, M. L., & Slattery, J. T. (2010). The road we must take: multidisciplinary team science. Science Translational Medicine. https://doi.org/10.1126/scitranslmed.3000421
Galván, A. (2017). The Neuroscience of Adolescence (1st ed.). Cambridge University Press.
Hardy, S. A., Nelson, J. M., Moore, J. P., & King, P. E. (2019). Processes of religious and spiritual influence in adolescence: a systematic review of 30 years of research. Journal of Research on Adolescence, 29(2), 254–275. https://doi.org/10.1111/jora.12486
Heine, S. J. (2020). Cultural psychology (4th ed.). W. W. Norton & Company.
Heiphetz, L., Lane, J. D., Watzky, A., & Young, I. L. (2016). How children and adults represent God’s mind. Cognitive Science, 40(1), 121–144. https://doi.org/10.1111/cogs.12232
Holmes, E. A., O’Connor, R. C., Perry, V. H., Tracey, I., Wessely, S., Arseneault, L., Ballard, C., Christensen, H., Cohen Silver, R., Everall, I., Ford, T., John, A., Kabir, T., King, K., Madan, I., Michie, S., Przybylski, A. K., Shafarman, R., Sweeney, A., & Bullmore, E. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: A call for action for mental health science. The Lancet Psychiatry, 7(6), 547–560. https://doi.org/10.1016/S2215-0366(20)30168-1
King, P. E., & Boyatzis, C. J. (2015). Religious and spiritual development. In M. E. Lamb & R. M. Lerner (Eds.), Handbook of child psychology and developmental science Socioemotional processes (Vol. 3, pp. 975–1021). Hoboken: John Wiley Inc.
King, P. E., Ramos, J. S., & Clardy, C. E. (2013). Searching for the sacred: Religion, spirituality, and adolescent development. In K. I. Pargament, J. J. Exline, J. W. Jones, K. I. Pargament, J. J. Exline, & J. W. Jones (Eds.), APA handbook of psychology, religion, and spirituality (Vol I: Context, theory, and research (pp. 513–528). Washington DC: American Psychological Association.
King, P. E., Carr, D., & Boitor, C. (2011). Religion, spirituality, positive youth development, and thriving. In R. M. Lerner, J. V. Lerner, & J. B. Benson (Eds.), Advances in child development and behavior, Vol 41 Positive youth development (pp. 161–195). Elsevier.
Lerner, R. M., Agans, J. P., DeSouza, L. M., & Gasca, S. (2013). Describing, explaining, and optimizing within-individual change across the life span: A relational developmental systems perspective. Review of General Psychology, 17(2), 179–183. https://doi.org/10.1037/a0032931
Lerner, R. M., Lerner, J. V., Bowers, E. P., & Geldhof, G. J. (2015). Positive youth development and relational-developmental-systems. In W. F. Overton, P. C. M. Molenaar, & R. M. Lerner (Eds.), Handbook of child psychology and developmental science: Theory and method (Vol. 1, 7th ed., pp. 607–651). Wiley.
Mason, C. (2009). The development of developmental neuroscience. The Journal of Neuroscience, 29(41), 12735–12745. https://doi.org/10.1523/JNEUROSCI.4648-09.2009
McAdams, D. P., & Pals, J. L. (2006). A new Big Five: Fundamental principles for an integrative science of personality. American Psychologist, 61(3), 204–217. https://doi.org/10.1037/0003-066X.61.3.204
Moshman, D. (2011). Adolescent rationality and development: Cognition, morality, and identity (3rd ed.). UK: Psychology Press.
Noble, H., & Heale, R. (2019). Triangulation in research, with examples. Evidence-Based Nursing, 22(3), 67–68. https://doi.org/10.1136/ebnurs-2019-103145
Overton, W. F. (2015). Processes, relations, and relational-developmental-systems. In W. F. Overton, P. C. M. Molenaar, R. M. Lerner, W. F. Overton (Ed), P. C. M. Molenaar (Ed), & R. M. Lerner (Ed)
Proctor, R. W. (2019). How psychologists help solve real-world problems in multidisciplinary research teams: Introduction to the special issue. US: American Psychological Association American Psychologist.

Saxe, J. G. (1872). The Blind Men and the Elephant. In The poems of John Godfrey Saxe. J. Osgood; Wikisource.

Smith, C., & Denton, M. L. (2005). Soul searching: The religious and spiritual lives of American teenagers. Oxford University Press.

Sternberg, R., & Grigorenko, E. (2001). Unified psychology. American Psychologist, 56(12), 1069–1079. https://doi.org/10.1037/0003-066X.56.12.1069

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.