



Developmental Perspectives on Adolescent Religious and Spiritual Development

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Abstract

Despite the prevalence of religiousness and spirituality among adolescents, little is known about the psychology of adolescent religious and spiritual development. The purpose of this article is to explain how scholars within the discipline of developmental psychology have begun to approach the topic. Specifically, the article details how developmental theory advances understanding of religious and spiritual development and overviews developmental methods that enable rigorous examination of the structure and function of adolescent religious and spiritual development. A Relational Developmental Systems metatheoretical approach, emphasizing longitudinal methods, is utilized to highlight ideographic and nomothetic aspects of adolescent religiousness and spirituality. Examples of theoretically and methodologically cutting-edge developmental research provide illustration. In conclusion, the article shows that developmental psychology provides insight toward a comprehensive approach to the study of religious and spiritual development and broadens the perspectives of other disciplines, while relying on other disciplines to deepen developmentalists' research.

Keywords Adolescent · Religiousness · Spirituality · Relational developmental systems · Religious development · Spiritual development

Introduction

Developmental psychology provides an important lens for viewing the multidimensional nature of adolescent religious and spiritual development. Developmental psychology approaches the topic broadly in order to study the multifaceted nature and function of religious and spiritual development during adolescence. In the last two decades, a growing body of research depicts the importance of considering many domains of development in order to understand the psychological processes involved in aspects of transcendent domains such as religious beliefs, transcendent experiences,

faith communities, and spiritual practices and rituals. Given that several publications reviewed the state of the field on existing research on adolescent religious and spiritual development (Good & Willoughby, 2008; Hardy & King, 2019; King & Boyatzis, 2015; King et al., 2013), the aim here is to discuss the unique perspective and potential benefits of a developmental approach to research on adolescent religiousness and spirituality. In particular, the present article focuses on the breadth of developmental psychology, especially as framed by ecological (Bronfenbrenner, 1979) and relational developmental systems approaches (Lerner et al., 2015; Overton, 2013, 2015). This encompassing frame of developmental psychology points to the importance of collaborations across disciplines.

Religious and spiritual *development* are distinct but overlapping constructs. Religious development is the change in a young person's capacity for engagement in the beliefs, doctrines, practices and rituals, and community of a religious tradition (King et al., 2013; Roehlkepartain et al., 2006). Spiritual development refers to changes in persons' experiences and responses to their perceptions of the transcendent (King et al., 2020b), and may occur within or outside the context of religion (Ai et al., 2021; Kapuscinski & Masters,

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2010; King & Boyatzis, 2015; Pargament et al., 2013). What distinguishes religious and spiritual development from other aspects of development is the role of belief in and/or experiences of the supernatural, sacred, or other forms of perceived ultimate reality. Whether these are conceptualized within a theistic or a nontheistic context, they allow for *transcendence*, which involves a profound connection to something beyond the self, providing meaning and informing identity, worldview, and behaviors (King & Boyatzis, 2015; Lerner et al., 2003; Riveros & Immordino-Yang, in press; Pargament et al., 2013). Although transcendence is often presumed to involve something “other worldly,” it is important within the study of adolescence to include “this world” experiences such as political causes, social experiences, patriotism, or other experiences that provide a sense of boundlessness and meaningful connection to something beyond the self.

Relational Developmental Systems Metatheory

One theoretical framework within developmental psychology that is useful for the study of adolescent religious and spiritual development is *relational developmental systems* metatheory (Lerner, 2006; Overton, 2013, 2015). This metatheory is an extension of Bronfenbrenner’s (1979) ecological framework that draws on work by Brandstatter (1998) and others regarding the active role of the agent in his/her own development. Relational developmental systems are informed by the worldviews of *relationalism* and *holism* (Lerner et al., 2018; Overton, 2015), which emphasize the concept that all organisms are embodied and embedded. All organisms are connected, and thus adolescent development must be considered within the context of the many systems in which young people live. Development occurs through bi-directional interactions between components at all levels of the system ranging from the cellular to the macrosystemic.

Although developmentalists attempt to capture complexity, individual studies can only consider limited variables and their inter-relatedness. Despite these limitations, the relational developmental systems worldview motivates developmental scientists to consider the nature of what is changing within a person, the dynamics of individual-context relations, the interactions at multiple levels of the system, and the individual’s active role as an agent in his/her own growth. Consequently, relational developmental systems serve both as a wide-angle lens to encompass the breadth of context and as a telephoto lens to focus on details of specific parts and how related they are to more proximal parts of the developing system. The core tenets of relational developmental systems are outlined in the next section.

Epigenesis: Developmental Complexity

The concept of *epigenesis* is useful for studying any facet of adolescent and religious spiritual development. Epigenesis is the developmental tendency for humans to grow in complexity over time resulting in the emergence of qualitatively different forms or capacities. Epigenesis explains why an adult human does not resemble a large infant, but rather a mature human who has an adult body with psychological capacities reflecting the growing complexities of maturation indicative of differentiation and integration over time (Overton, 2013, 2015). Epigenesis is not only evident in bodily form, but in psychological capacities like abstract thinking and identity development. Relatedly, Werner (1957) introduced the *orthogenetic principle* to convey that psychological capacities both grow in complexity and also in differentiation.

Within the study of adolescent religious and spiritual development, principles conveying the importance of increasing complexity and differentiation are more often addressed theoretically, and less often tested empirically. That said, as an attempt to understand the complexity of adolescent spirituality, a handful of qualitative studies served to uncover and explore how adolescents experience transcendence, spirituality, and religion (see Abo-Zena & King, in press; Dill, 2017; King et al., 2014; Layton et al., 2011; Schachter & Hur, 2019). For example, one study explored the themes of spirituality found in the lives of religiously diverse youth who were nominated for being highly spiritual in their communities (King et al., 2014). Through a hybrid exemplar and consensual qualitative research method, this study revealed that for their international sample of youth, spirituality involved experiencing and engaging with their perception of transcendence (e.g., God, Allah, nature), an active commitment or fidelity to their beliefs, and intentional behaviors motivated by their beliefs. The narratives of these highly developed spiritual youth pointed to increasing coherence across transcendent experiences, beliefs, goals, identity, and behaviors, suggesting that the integration of beliefs into identity, motivation systems, and behaviors may be an indication of spiritual development. These findings are buttressed by quantitative research, such as longitudinal studies showing that while most youth become less religious over time, some actually deepen their involvement and commitment (e.g., Good et al., 2011).

In addition, the growing body of research on spiritual development during emerging adulthood suggests that although religious participation rates of those in their third decade of life generally decrease, their curiosity and engagement in spiritual questions and meaning may increase (see Barry & Abo-Zena, 2014). One interpretation

of these findings is that while maturing adolescents may initially engage in religion and/or spirituality by following behavioral norms, they will, at some point, begin to question, seek their own meaning, and subsequently internalize their own spiritual beliefs and values. These pursuits eventually inform a maturing person's differentiated identity that may include beliefs from their family, religious tradition, and culture identity (Barry & Abo-Zena, 2014; Whitney & King, 2014). Regardless of the source of the convictions, the beliefs are more intentionally internalized into one's identity.

Bi-directionality

The emphasis on the significance of bi-directional interactions at all levels of the developing system is also a relevant theoretical underpinning to the study of adolescent religious and spiritual development (see Hardy et al., 2019). *Probabilistic epigenesis* conveys the idea that human development grows in complexity in a predictable or probable direction, but to an undetermined end (Gottlieb, 1998). This emphasizes that although nature (e.g., genes) might influence development, the development of human life occurring in the complexity of a constantly changing environment is also open to the influence of nurture and is not predetermined (Slavich & Cole, 2013). Consequently, relational developmental systems metatheory provides a relational-process approach based on the notion that human development occurs through bi-directional interactions between a person and the many contexts in which they live. Unfortunately, although developmental scientists often consider the relationships between adolescents and other people in their developmental systems when studying influences on religious and spiritual development (see Hardy & Longo, 2020; King & Boyatzis, 2015), most empirical studies are unidirectional. One of the few exceptions is a study demonstrating bi-directional relations between the religiosity of individual adolescents and the religiosity of their peers (French et al., 2014).

Developmentalists not only consider that development occurs through interactions between persons, but they also attend to the influences at different levels of the system. Recent reviews of research on processes of religious and spiritual development provide overviews of the multifaceted nature of religiousness and spirituality at the individual and ecological levels (Hardy & Longo, 2020; Hardy et al., 2019). This approach is exemplified by a qualitative study that explored the intersection of culture, religion, gender norms, and beliefs on adolescent development (Abo-Zena, 2019). Exploring the experiences of Muslim adolescent females coming of age, the researcher found that identity and meaning the young women ascribe to experiences in life, such as dress and rites of passage, are not only informed by cultural

and religious belief systems, but are also impacted either by the clashing or the coherent relationships between local cultural norms and religious beliefs. Similarly, a quantitative study using a nationally representative dataset identified significant predictors of religiosity at the levels of the individual, family, school, community, and region of the U.S. (Gunnoe & Moore, 2002).

Plasticity and Agency

In addition to highlighting the bi-directionality between person and context, probabilistic epigenesis also emphasizes human *plasticity* and the potential for change and growth, which is necessary to understand adolescent religious and spiritual development. Consequently, relational developmental systems approaches offer a positive perspective on human development and often look for optimizing developmental trajectories that lead to thriving (Lerner et al., 2015; Overton, 2015). Furthermore, such developmental approaches tend to be agentic because they emphasize the role of the person engaging in his/her own development. Relational developmental systems metatheory views the individual and their context in a continuous, mutually constitutive relationship. Thus, the extent to which a person influences the world around them, whether for good or bad, continues to result in different and ever-changing developmental paths across the lifespan (Baltes et al., 1977; Lerner et al., 2015; Overton, 2015). As such, one's developmental system is like a perpetually flowing river that one alters through the course of their own development. Consequently, developmental psychology, especially applied developmental psychology, seeks to understand how to create positive change and to optimize the fit between young persons and their contexts.

Not only do developmentalists track changes in the facets of religious and spiritual development, but they also seek to identify processes within religious and spiritual development that may promote positive development. For example, a mixed methods longitudinal study of emerging and young adults examined the relationship between religious beliefs, identity, and commitment over time to understand why some decline and others increase in their religious commitments (Jia et al., 2020). Specifically, the study found that an early religious belief at age 23 positively predicted religious commitment 9 years later at age 32. However, the relationship was mediated by religious identity maturity at age 26. Furthermore, interviewed participants who were able to connect with significant markers of religious identity maintained high religious commitments at age 32, suggesting that religious identity in one's twenties might prevent a decline in religious commitment later in life. In addition, the Compassion International (CI) Study of Positive Youth Development, a longitudinal mixed-methods study, examined how spirituality and religion may be linked to both potential

youth strengths and developmental resources that coalesce to promote positive youth development (King et al., 2020a, 2020b; Tirrell et al., 2019). An analyses from this study found that for Salvadoran youth involved in CI programs, the ecological assets of caring adults, opportunities to learn life skills, and participating in leadership through the faith-based youth development program predicted the personal strengths of spirituality, hope, and internal self-regulation, which in turn predicted youth contributions (Tirrell et al., in press). These findings demonstrate that being involved in the CI faith-based youth program allowed youth to have access to both ecological and individual assets, which together serve to predict thriving behaviors like acts of contribution and helping their communities.

The Specificity Principle

Following from relational developmental systems metatheory is the *specificity principle*, which seeks to understand ideographic or individual differences and considers what promotes positive development for what youth and in what circumstances and at what timing (Bornstein, 2017). The specificity principle is seminal to fully understand what promotes religious and spiritual development for different youth in different circumstances. For instance, in seeking to understand how diverse youth may develop religiousness over time through interactions with others, researchers may consider in what circumstances friends have more influence than parents on adolescent religious development (Desrosiers et al., 2011; Schwartz, 2006). Another study identified which types of youth in which types of families had the least and most adaptive religious development outcomes (Goodman & Dyer, 2019). As anticipated, highly religious families generally produced more religious adolescents. However, there was actually a negative link between parent and adolescent religiosity in families with low authoritative mothering.

In other instances, the specificity principle may be used to further examine the unique strengths and challenges faced by minority populations. For example, previous research studied how early adolescent Muslim females experienced puberty while navigating their religious and gender identities (Abo-Zena, 2019). The youth reported challenges and assets regarding modest dress and wearing *hijab*. While these girls often described wearing Islamic dress with pride, various public responses were described, as ranging from curiosity and compliments to intolerance and instances of discrimination. These findings illustrated that whereas religion can contribute toward positive youth development, it may also provide challenges in development, particularly when less cohesion between religious experiences and cultural narratives exists. Although not yet documented in developmental science, further research may explore how media coverage

of recent historical events that feature “Jesus 2020” and “Trump 2020” waiving in the siege of the US capital will influence religious and spiritual identity for the current generation of adolescents.

In addition, the specificity principle provides a lens for recognizing in what situations and for what youth religiousness or spirituality may be beneficial or not. Researchers found that adolescents draw upon religion in an idiosyncratic manner to address developmental needs (Schachter & Hur, 2019). For example, for some youth, religious beliefs are an important source of religious coping, whereas for other youth their religion is not a source of coping (Fatima et al., 2018; Sarizadeh et al., 2020). In order to explore idiosyncratic experiences of religiosity, Schachter and Hur offered a systematic method using a holistic narrative approach to explore the personal ways that individuals attribute meaning in general and specifically to religion. Their analyses demonstrate that religion has unique meaning for different individuals, and consequently has different relevance and influence at different times across various lives.

The specificity principle also provides further nuance in understanding religious context in relation to psychosocial health outcomes among specific groups. In a study of religious and sexual identity among adolescents and young adults who identified as lesbian, gay, bisexual, transgender, or queer (LGBTQ) raised in Christian contexts (Dahl & Galliher, 2012), qualitative analysis identified eight themes suggesting both positive and negative outcomes relating to religious context. Positive outcomes among these individuals include an increased sense of self, acceptance of others, incorporation of religious values, and social support. In contrast, the negative outcomes reported feelings of inadequacy, religious-related guilt, depressive symptoms, and social strain. As such, the specificity principle helps provide further nuance to the various ways that different youth positively or negatively engage with their specific contexts that relate to their religious and spiritual development.

Developmental Methods

The complex purview of developmental approaches yields a methodologically diverse field of study, involving experimental, quasi-experimental, and correlational designs, quantitative, qualitative, and mixed methods, and cross-sectional and longitudinal data. Nevertheless, what sets developmental psychology apart from the other disciplines is a heavy reliance on longitudinal data to examine change and temporal ordering. Longitudinal research can be used to assess change, as well as predictors and outcomes.

Five Goals of Longitudinal Research

Over four decades ago, two pioneering developmental methodologists proposed five goals for longitudinal research (Nesselroade & Baltes, 1979; for further discussion, see Grimm et al., 2016). These goals provide a framework for the study of adolescent religious development. While there are scholars from a variety of disciplines who have conducted studies addressing these five goals, those conducting such studies of change are often developmental psychologists.

Intraindividual Change

The first goal of longitudinal research is to identify intraindividual change, or change within individuals over time. Growth modeling is the primary analytic technique for identifying intraindividual change. While change can technically be analyzed with only two waves of data (e.g., Lee et al., 2018), sophisticated analyses of change (e.g., tests of non-linearity) require at least three waves of data (Grimm et al., 2016). Thus, growth modeling studies utilize a minimum of three waves of data. There are two primary approaches to growth modeling: structural equation modeling and multi-level modeling (Grimm et al., 2016). Structural equation modeling uses a factor analysis framework (typically referred to as latent growth curve modeling), where each individual gets a factor score on latent intercept and slope factors. Multi-level modeling uses a regression framework (specifically, random effects) with time as a predictor, where each individual has his/her own regression line. Both approaches yield the average intercept and slope across the sample to provide a general picture of the trajectory of change. A few dozen studies have examined intraindividual change in religiosity across adolescence using techniques such as these (for review, see Hardy & Longo, 2020). In general, such studies find declines in religiosity during adolescence, particularly for religious involvement, including prayer and attendance (e.g., Dyer et al., 2020). Findings for religious importance, spirituality, and other dimensions of religiosity are more mixed. For instance, some studies report declines in religious importance (Dyer et al., 2020), while others report stability (Davis III & Kiang, 2016).

Interindividual Differences in Intraindividual Change

The second goal of longitudinal research is to identify interindividual differences in intraindividual change—in other words, individual variation in growth trajectories (Grimm et al., 2016; Nesselroade & Baltes, 1979). Intercept and slope variances obtained through growth modeling capture this information. This is one thing that sets growth modeling apart from simpler techniques, such as repeated measures

ANOVA, which focus on fixed effects (which in this case means at each wave; Newsom, 2015). Neglecting to examine random effects assumes that all individuals follow the same trajectory, which is unlikely to be true. In fact, it is possible that very few, if any, individuals in the dataset actually follow the average trajectory. While reports of interindividual variation in intraindividual change are often not interesting in and of themselves, any investigation into predictors, correlates, or outcomes of change will be fruitless if there is no interindividual variation in intraindividual change (either if it is not examined or if it does not exist). Indeed, studies of religious development using growth modeling typically report significant interindividual variation in intercepts and slopes, regardless of the dimension of religiosity or the specific analytic approach (e.g., Davis III & Kiang, 2016; Dyer et al., 2020).

Interrelationships Among Changes in Various Aspects of Development

The third goal of longitudinal research is to examine interrelationships among changes in various aspects of development (Grimm et al., 2016; Nesselroade & Baltes, 1979). In terms of religious development, this means examining interrelationships between changes across multiple dimensions of religiosity, or interrelationships between changes in religiosity and changes in other phenomena (e.g., developmental contexts, individual characteristics, or youth outcomes). The current gold standard way of doing this is through use of parallel process growth modeling (also called bivariate or multivariate growth modeling; Grimm et al., 2016). This technique involves the specification of growth models for each distinct construct, as well as estimation of covariances between the intercepts and slopes across constructs. Typically, the parameter of interest is the correlation between the slopes, as this yields information regarding how change in one construct is related to change in the other. For example, one study demonstrated interesting patterns of correlations between changes in religious involvement or participation across adolescence and changes in various aspects of identity formation (Hardy et al., 2011). Another study found a positive correlation between changes in adolescents' own religiosity and the religiosity of their friends, suggesting that youth who increase more in religiosity over time have friends who change similarly (French et al., 2014). On the other hand, this same study found a negative correlation between changes in religiosity and problem behavior, suggesting that youth who increased more in religiosity over time also decreased more in their problem behavior.

One important caveat to these parallel process models is that they cannot evaluate temporal ordering, because they analyze change across the entire time span rather than occasion-specific changes (Grimm et al., 2016). Thus, while

they can tell us that two processes are linked, they cannot tell us which drives which. For this reason, methodologists have developed “hybrid” models that blend parallel process models with various components or forms of auto-regressive cross-lagged models (Berry & Willoughby, 2017; Curran et al., 2014). One recent application to religious development examined relations between changes in religiosity and self-regulation across adolescence (Hardy et al., 2020a, 2020b). Parallel process models found positive correlations between changes in the two phenomena, suggesting that youth who increased more in religiosity also increased more in self-regulation; while the hybrid models (latent curve models with structured residuals) found that much of this association was occasion-specific, with bi-directional relations over time between religiosity and self-regulation.

Causes of Intraindividual Change

The fourth goal of longitudinal research is to identify causes of intraindividual change (Grimm et al., 2016; Nesselroade & Baltes, 1979). Given that most research in psychology focuses on interindividual or between-person associations, less work has examined such intraindividual or within-person associations. One way to do this is using intensive longitudinal data, also called experience sampling data (Bolger & Laurenceau, 2013). Such data are typically collected at daily increments rather than yearly increments, like standard longitudinal data. This allows for analysis of daily fluctuations at the individual level (i.e., intraindividual or within-person variability). One application to religious development found that on days when young adults did more religious activities, they felt closer to God; and on days when they felt closer to God, they also experienced more moral emotions (gratitude, forgiveness, and empathy; Hardy et al., 2014). However, no lagged relations across days were found. In other words, religiosity on 1 day was not related to closeness to God the subsequent day, and closeness to God on 1 day, similarly, was not related to moral emotions the subsequent day. Another way to examine causes of intraindividual change is using the hybrid models discussed earlier. Standard auto-regressive cross-lagged models do not distinguish between between-person and within-person effects, while these hybrid models do (Berry & Willoughby, 2017; Curran et al., 2014). Thus, bi-directional links between religiosity and self-regulation found by Hardy and colleagues were at the within-person or intraindividual level (Hardy et al., 2020a, 2020b). Specifically, when youth were more religious at one occasion than their own average religiosity, they tended to increase in self-regulation by the next occasion (and vice versa—when youth were higher at one occasion on self-regulation than their own average, they tended to increase in religiosity by the next occasion).

Determinants of Interindividual Differences in Intraindividual Change

The fifth goal of longitudinal research is to identify determinants of interindividual differences in intraindividual change (Grimm et al., 2016; Nesselroade & Baltes, 1979), which could expand to include identification of outcomes of interindividual differences in intraindividual change. This is primarily done using auto-regressive cross-lagged modeling, which assesses whether people higher on a predictor variable at one occasion tend to change more or less on an outcome by the next occasion (Newsom, 2015). Given that these models only require two waves of data, and are somewhat simpler than other approaches (i.e., an application of linear regression), of the analyses discussed here, this approach is most frequently used in religious development research and usually studies outcomes of religiosity. As a specific example to religious development, one study found that religiosity tended to drive future changes in identity formation more than the inverse (Hardy et al., 2011). In another study, an adolescent’s own religiosity at one occasion positively predicted his/her friend’s religiosity at the next (French et al., 2014). A more recent study looked at development in worship service attendance, prayer, and religious importance, finding that they were all reciprocally related over time (Dyer et al., 2020).

Methods for Studying Predictors and Outcomes of Religious Development

In a recent systematic review of processes of religious and spiritual development, researchers outlined another typology of methods and analyses developmental psychologists use to study religious development (Hardy et al., 2019). The focus was on reviewing studies of outcomes of adolescent religiosity that in some way went beyond bivariate associations. The structure of the review consisted of the following questions:

- (1) Is the development of religiosity related to the development of youth outcomes?
- (2) What is the directionality of relations between religiosity and youth outcomes over time?
- (3) Is daily variability in religiosity linked to daily variability in youth outcomes?
- (4) Are relations between religiosity and youth outcomes causal?
- (5) What are the mediating processes by which religiosity yield adaptive youth outcomes?
- (6) What are the moderating processes upon which links between religiosity and youth outcomes are conditional?
- (7) What typical patterns of religiosity and youth outcomes are present in adolescents?

- (8) How do adolescents experience their religiosity as being meaningfully related to other aspects of their life?

While the systematic review focused on outcomes of religiosity, these methodological and analytic approaches work just as well for predictors of religiosity. Additionally, many approaches provide the same analyses noted above regarding the five goals of longitudinal research. Specifically, in the previous section, the aforementioned analyses associated with the first three questions, because indeed these are where developmental psychology exemplifies its methodological strengths. In comparison, question four involves experimental design, questions five and six mediation and moderation analyses, question seven person-centered analyses (e.g., mixture modeling), and question eight qualitative methods. All of these methods and analyses have certainly been used by developmental psychologists to examine religious development. However, they have similarly been used to one degree or another by scholars in all the other disciplines featured in this special issue (cultural psychology, social/personality psychology, cognitive psychology, sociology, developmental neuroscience, and clinical neuroscience). Thus, they are less the specialty of developmental psychology than the methods and analyses discussed earlier. An exception is that person-centered analyses can be used to address the goal of longitudinal research to examine interindividual differences in intraindividual change. Person-centered analyses applied to longitudinal data are called growth mixture models, and address interindividual differences in intraindividual change by identifying classes of growth trajectories, rather than a single average growth trajectory. Generally, the technique identifies some classes of youth who are stable in religiosity over time (with classes varying in terms of level, from low to high), and other classes of youth who change in their religiosity over time (with classes varying on when and to what extent they decrease or increase). Some growth mixture modeling studies of religious and spiritual development have been conducted by developmental psychologists (e.g., Eisenberg et al., 2011) and others by sociologists (e.g., Lee et al., 2017).

Connecting Theory and Method

Developmental methodologists urge researchers to have theory drive the choice of method, rather than the inverse (Grimm et al., 2016; Lerner, 2006). The present article provides focus on relational developmental systems theory, which emphasizes the role of the agent, embedded in and dynamically interconnected with a complex web of multiple layers of developmental contexts (Lerner et al., 2015). Such a view of development is arguably more comprehensive and potentially more realistic than that often provided by other

perspectives, but also overwhelmingly ambitious. No single study or analysis could ever simulate the complexity of embedded developing systems justice. Nevertheless, developmental psychologists have made small steps toward the ideal laid down by relational developmental systems theory. All of the methods outlined above can be, and indeed to some extent have been, used to examine religious development, with attention to relational developmental systems theory principles such as epigenesis (developmental complexity), bi-directionality, plasticity/agency, and specificity. Qualitative methods are well suited for exploring all of these processes from the perspective of the agent and his/her experiences (e.g., Abo-Zena, 2019; Layton et al., 2012; King et al., 2014; Schachter & Hur, 2019). Additionally, longitudinal methods track processes over time, allowing for assessment of directionality (e.g., Hardy et al., 2020a, 2020b), developmental complexity (e.g., Dyer et al., 2020), and the role of the agency (e.g., Schnitker et al., 2020). Lastly, person-centered analyses (e.g., Audette et al., 2018; Goodman & Dyer, 2019), moderation analyses (Hardy et al., 2020b), and qualitative methods (e.g., Abo-Zena, 2019; King et al., 2020a, 2020b; Liang & Ketcham, 2017) provide opportunities for examining applications of the specificity principle.

Developmental Psychology in Context

Developmental psychology is a broadly focused discipline that can help expand the perspectives of other disciplines, perhaps connecting them to each other. For example, relational developmental systems theory (Lerner et al., 2015), as an extension of Bronfenbrenner's (1992) bioecological systems theory, allows for the consideration of neurological, social, and cultural contributions to adolescent religiosity and spirituality. Bronfenbrenner positioned the individual as the center surrounded by layers of proximal and distal developmental contexts. Further, the individual is often seen in developmental psychology as made up of interconnected biological, cognitive, and social processes (Arnett & Jensen, 2018). Neuroscience (developmental and clinical) focuses on the biological level of the individual; cognitive psychology focuses on the cognitive level of the individual; and personality psychology focuses on personality processes. Then, moving from proximal to distal contexts, social psychology focuses on immediate social contexts, sociology focuses on community and societal level contexts, and cultural psychology focuses on cultural contexts. Thus, the other disciplines tend to focus on pieces of Bronfenbrenner's model, while developmental psychology encourages us to consider the entire model (i.e., the individual, with all their inner processes, situated in concentric layers of developmental contexts). This reality points to the benefits of interdisciplinary collaborations. An example of such a

theoretical interdisciplinary collaboration describes a model of thriving that integrates principles from personality, virtue science, systems theory, psychology of religion and spirituality, and developmental science to identify the multiple levels of contributors to the development of thriving (Schnitker et al., 2020).

Second, given developmental psychology's focus on change and growth, it tends to emphasize human agency more than any other disciplines. A number of the pioneers in developmental psychology, such as Piaget and Erikson, argued for an important role of the individual in guiding his/her own development. In particular, Piaget's cognitive developmental theory is often described as constructivist, given that individuals construct their own development through interaction with peers. Additionally, these and other pioneering developmental psychologists also prioritized explicit or conscious processes. While there are certainly exceptions (e.g., McAdams & McLean, 2013; Wink et al., 2019), most other social sciences disciplines tend to be more deterministic and less agentic than developmental psychology. For example, individuals are often viewed as heavily influenced by their biology in neuroscience, by cognitive systems and environmental input in cognitive psychology, by social situations in social psychology, by dispositions in personality psychology, by social structures and forces in sociology, and by cultural processes and worldviews in cultural psychology. In other words, of all these disciplines, developmental psychology generally seems to render the strongest role for the individual, place the greatest emphasis on conscious processes, and leave the most room for individual agency.

Third, developmental psychology is more focused on development and change processes than most of these other disciplines. With the exception of perhaps developmental neuroscience, documenting change over time is not a mandate in the other fields; whereas change is fundamental to developmental psychology's view of and approach to studying the world. In developmental psychology, issues of developmental maturity are crucial. For instance, sample age has implications for research findings. Many other disciplines rely on college student research participants, but generalize the findings to all adults. In developmental psychology, college students would be regarded as a specific population at a certain point in their developmental trajectory. As another example, in many other disciplines, researchers might administer a measure at multiple time points to establish test–retest reliability. Stability is the rule, and change the exception. Developmental psychologists, on the other hand, would view this as longitudinal data, see change as the rule, and see stability as the exception.

Fourth, given all of the above, developmental psychology generally has a more complex or holistic approach to research than other disciplines. Like the parable of the “Blind Men and the Elephant” described in the introduction

to this special issue, no discipline or subdiscipline seems to see the entire elephant. Nevertheless, developmental psychology arguably has the capacity to see more of the elephant, whereas the other disciplines are more equipped to describe specific parts. In that sense, developmental psychologists are at times more generalists rather than specialists. Although developmental psychology may provide a helpful frame for considering the complexities of adolescent religious and spiritual development, developmentalists would be wise to collaborate with different scholars to expand their depth of understanding in specific areas. In other words, developmental frameworks can appeal to neuroscience to know how the body works, to cognitive psychology to understand thought processes, to personality psychology to understand individual differences, to social psychology to understand the role of the situation, to sociology to understand societal forces and trends, and to cultural psychology to understand the broader cultural context. Yet, perhaps these other disciplines sometimes “can't see the forest for the trees.” Thus, a strength of the developmental psychology perspective is that it takes a more holistic and dynamic view of human developmental and functioning, providing a frame to synthesize various other approaches in order to reveal the emerging picture of adolescent religiousness and spirituality.

Recommendations from a Developmental Psychology Perspective

Based on the developmental theory and methods outlined above, a number of recommendations emerge for researchers in developmental psychology and other disciplines. First, scholars are encouraged to draw on developmental models to frame and conduct research on adolescent religious and spiritual development that address the complexity of the phenomena. Human development is truly complex, so the more narrowly and simply researchers approach it, the less realistic and useful findings will be. Scholars in each discipline tend to focus on particular aspects of human development and functioning, and, at times, may benefit by broadening their scope. For example, cultural psychologists and sociologists, who often focus on distal contexts, may consider the role of more proximal contexts, as well as individual factors. In the chapter on cultural developmental approaches, Jensen (2021) describes how cultural and developmental perspectives combine to shed light on different spiritual and religious affiliations. Likewise, the chapter on sociology describes how sociologists approach the study of adolescent religion and spirituality (Pearce & Hayward, in press). In general, social psychologists might consider the role of individual differences, while personality psychologists might consider the role of situations and experiences. Both might

examine more distal developmental contexts like Schnitker et al. (2021), who offer a comprehensive approach to personality theory that considers multiple levels of influence on adolescent religious and spiritual development, including characteristic adaptations, relationships, macrosystemic beliefs, and specific situations. Although cognitive psychologists and neuroscientists tend to focus on beliefs and cognitive processes, Riveros and Immordino-Yang (in press) demonstrate the importance of considering the social and emotional contexts in the process of meaning making involved in religious or spiritual development. Additional research in socio-affective neuroscience demonstrates the influence of poverty and culture on these processes (see Immordino-Yang, 2016). In general, most researchers can improve the novelty and impact of their research by broadening to include more dimensions of the individual (e.g., biological, cognitive, and social), as well as more layers of developmental contexts (e.g., family, peers, and religious communities). Regardless of the various levels of complexity under consideration, the emerging field of psychology of religion and spirituality would be expanded if findings were discussed in context of a broader systemic framework serving to highlight the contribution of specific findings for adolescent religious and spiritual development more holistically.

Second, investigate the dynamics of relations between variables over time. This is one specific way researchers can be more authentic and sophisticated in their thinking about adolescent religious development. For instance, researchers should attend to how various developmental processes might be interconnected over time (James & Ward, 2019). Parallel process growth modeling (e.g., Hardy et al., 2011) is useful for this type of analysis. Another way researchers can attend to dynamics of relations between processes and variables is by thinking in terms of bi-directionality. This can be analyzed using auto-regressive cross-lagged modeling, or hybrid models that combine parallel process growth models and auto-regressive cross-lagged models (e.g., Hardy et al., 2020a, 2020b). In both cases, research can study how various dimensions within the individual are dynamically related (e.g., religious cognition, affect, and behavior), or how individual and contextual factors are related (e.g., family, peers, and religious communities).

Third, consider the role of the agent in his/her own development. Rather than treating youth as sources of data regarding outcomes and predictors, consider them as agents driving their own development. How might considering youth as active agents affect the theories and methods that could or ought to be used to study adolescent religious and spiritual development? Perhaps constructs, such as religious identity and internalized religious motivation, might feature more prominently in empirical research, as

they capture in some way adolescents' ownership of their religious and or spiritual development (e.g., Hardy et al., 2020b).

Fourth, remember the specificity principle. Often researchers start by thinking in terms of universal laws, and they seek to generalize their findings broadly. However, in the end, as is often the case, theories and findings only apply to specific people at specific points in the lifespan in specific situations. Cultural psychology researchers frequently demonstrate this. Thus, researchers may examine the degree to which their theories and findings generalize, and think in a more nuanced way about when, where, how, in what way, and for whom particular religious development processes may manifest. Cultural developmental psychology heeds scholars to consider the meanings and nuances within the cultures involved in the investigation (Jensen, 2015).

Fifth, examine interindividual differences in changes in religiosity and spirituality across adolescence, as well as predictors and outcomes of that change (e.g., Dyer et al., 2020; Hardy et al., 2020a, 2020b). In other words, instead of just asking how religiosity and spirituality changes or even how a specific dimension of religiosity changes, ask why it changes in that way, what the consequences might be, and whether everyone changes in that same way. Doing so can greatly increase the innovativeness and impact of research.

Conclusion

Developmental psychology has lofty aspirations when considering the complexity and dynamic interactions of potential micro and macro systems and individual level factors ranging from biological to the transcendent. Because its purview offers breadth and depth, developmental psychology offers a comprehensive approach to the study of religious and spiritual development. That said, the breadth of the field often results in specific areas of development being understudied. Consequently, one of developmental psychology's greatest contributions may be to offer a framework in which other disciplines can locate themselves and highlight areas requiring interdisciplinary expertise. In addition, developmental methods allow for understanding ideographic and nomothetic changes over time that are pertinent, but not often applied in other disciplines. The theoretical and methodological approaches within developmental psychology may help scholars examine the relative and interactive roles of various individual and contextual factors in adolescent religious and spiritual development. In turn, interdisciplinary collaboration would be poised to leverage scientific efforts for increasing knowledge of this important and complex aspect of human development.

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Declarations

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

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