THE PSYCHOLOGY OF RELIGION

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■ **Abstract** This chapter discusses progress in the psychology of religion by highlighting its rapid growth during the past 25 years. Recent conceptual and empirical developments are described, with an emphasis on the cognitive and affective basis of religious experience within personality and social psychology. Religion and spirituality as domains of study, as well as being common and important process variables that touch a large portion of human experience, are highlighted. Movement away from the previously dominant measurement paradigm is noted, and particularly promising directions suggestive of an emerging interdisciplinary paradigm are described.

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INTRODUCTION

It has been 15 years since the last (and only) chapter on the psychology of religion appeared in the *Annual Review of Psychology* (Gorsuch 1988). The psychology of religion as an identifiable subfield of psychology has grown rapidly since then. The publication of an increasing number of books on the topic, including several

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published by the American Psychological Association (APA), testifies to the vibrancy of the field (Emmons 1999; Hill & Hood 1999; Koenig 1998; Miller 1999; Pargament 1997; Richards & Bergin 1997, 2000; Shafranske 1996). Whereas the more applied areas of psychology such as clinical, counseling, and health have taken the lead in examining links between religion and psychological, physical, and interpersonal functioning, basic subfields are also recognizing that spiritual and religious influences may be profoundly important (e.g., Emmons & McCullough 1999, Paloutzian & Kirkpatrick 1995).

Because of this rapid growth, this chapter cannot provide comprehensive coverage of recent developments for all topics in the psychology of religion. Recent research on religion and spirituality as human phenomena is almost as vast and diverse as religious life itself. A literature search using the PsychInfo database for the period 1988–2001 returned 1198 citations for the term religion and 777 citations for spirituality. This review, therefore, must of necessity be selective rather than exhaustive. Because the clinical psychology of religion has received a great deal of attention, we have chosen to highlight less-well-publicized areas of scholarship in the psychology of religion, particularly in the fields of personality and social psychology, which are new and not already documented by comprehensive summary sources elsewhere. This chapter has several purposes: to document the various trajectories that the psychology of religion has had during the previous century, to explain some of the reasons for the trends that have been observed, to illustrate how all of the topics within the psychology of religion are extensions of and feedback to the overall body of theory and the database from general psychology, and to sketch the newest lines of emerging research that show promise of contributing significantly to psychology during the next few years.

Psychology of Religion Then and Now

In psychology's early days, at a time when all psychological thinking was fresh and new, and when theory, research methods, statistical tools, and subdisciplines within this now immense and rich field were not even dreamed of in their modern form, those who were pioneering this field (Hall 1904, 1917; James 1902; Starbuck 1899; see also Vande Kemp 1992) took it as a serious part of their work to study the psychological aspects of human religiousness. The challenge for the next century of psychologists (i.e., us) is to follow this example and do what they began to do—come to an understanding of the psychological bases of religious belief, experience, and behavior, with the goal of applying this knowledge for human good.

The attention to this topic by the generation of psychologists who came after those early pioneers declined from approximately the mid 1920s until the mid 1960s. Several intradisciplinary reasons for this have been suggested (Paloutzian 1996). These include but are not limited to the establishment of scientific psychology after the model of physics, the separation of psychology departments from their former home in philosophy departments, and the tendency by psychologists to stay away from "taboo" topics that might be considered too philosophical or

too theological. However, during this period there were writings by what might be called the "grand theorists" of religion (Freud 1927, Jung 1938; see Wulff 1997 for a complete presentation of these), but these writings did little to advance the psychology of religion in the stricter, data-based sense. That is, these were overarching theories of human nature that were attempts to explain everything, including religiousness. Although they are rich ideas about what processes may underlie religiousness, they did little to feed the quantitative research that is mushrooming today.

The impressive flowering and maturing of the discipline as we know it today is embedded in the co-occurrence of several factors. Most notably, the re-emergence of the field was partly due to a generation effect. Just as the early work was done by leaders who invested efforts in this topic (Wulff 1998), a new group of psychologists emerged whose concerns included issues of social relevance and whose view of psychology was expansive. The social upheavals of the 1960s made them aware of the need to use their psychological training to study real-life issues such as violence, aggression, prejudice, sexism—to tackle the big problems (Hester 1998). Religion, among the most powerful of all social forces and here as long as there have been human beings [e.g., it has been suggested that humans be thought of as *Homo religiosus* because religion has been present as long as there have been *Homo sapiens* (Albright & Ashbrook 2001)] and showing no sign of going away, is among them. Following the lead of Gordon Allport, in which religiousness was found to be related in important but nonobvious ways to racial prejudice (Allport 1954, Allport & Ross 1967), the dramatic recent growth of the field began.

The Upsurge of the Past Quarter Century

The psychology of religion re-emerged as a full-force, leading-edge research area that contributes new knowledge, data, and professional activity to the rest of psychology. This is apparent upon examination of the recent trends in the publication of textbooks and journal articles, presentations at professional meetings, teaching courses in the psychology of religion, the establishment of new journals, books on clinical and health issues, and the development of psychology of religion research that interfaces the theory and topics of the mainstream discipline. These trends became visible after the establishment of APA Division 36, Psychology of Religion, in 1976.

One of the most obvious evidences of the development of an area of scholarship can be seen by examining the numbers and frequency of books that are published in that area. Textbooks, in particular, are a benchmark source of data because they serve the purpose of summarizing research and they reflect activity in a field. Prior to 1982 one could look far and wide for current books on the psychology of religion and come up empty-handed. No recently published books existed. Things changed quickly during the 1980s, however. Psychology of religion textbooks were published in rapid succession by Batson & Ventis (1982), Paloutzian (1983), Spilka

et al. (1985), and Brown (1987), and Wulff's (1991) book was in press before the decade was out. The 1990s saw this trend replicate and expand. Some of the 1980s books came out in second editions, including Batson et al. (1993), Paloutzian (1996), Hood et al. (1996), and Wulff (1997), and other books were added to the list (Beit-Hallahmi & Argyle 1997, Pargament 1997, Spilka & McIntosh 1997). This trend continues as the new century begins (Argyle 2000, Loewenthal 2000). Also, for the first time separate introductory chapters were included in general psychology textbooks (Santrock & Paloutzian 1997, 2000). This flourishing of textbooks feeds the increased teaching of psychology of religion (Hester 2002) and documents the vibrant activity that is a clear sign of the growth of the field.

Textbooks do not make for major contributions to a field on their own, however. They depend on the quality and visibility of the research on which they are based. During the past 25 years psychology of religion material has appeared with increasing frequency in high-end journals. In addition, and added to the already existing psychology of religion journals such as the Journal for the Scientific Study of Religion and the Review of Religious Research, new journals devoted to this topic have been established. One of them, The International Journal for the Psychology of Religion (established in 1990) is published in the United States, and the other, Mental Health, Religion, and Culture (established in 1998) is published in the United Kingdom. To complement the function served by journals, the annual series Research in the Social Scientific Study of Religion (JAI Press, Inc., established in 1990) and the topic's first Annual Review chapter (Gorsuch 1988) appeared, as did a chapter on religion and health (Chatters 2000). Finally, special issues of leading journals are appearing that focus on religious influences on personal and societal well-being (Paloutzian & Kirkpatrick 1995), religion in the psychology of personality (Emmons & McCullough 1999), religion and the family (Parke 2001), religion and adult development (Sinnott 2001), and religion as a meaning system (Silberman 2003). These trends make it clear that individual researchers are including religious dimensions in various aspects of their work and that journals of the highest quality and influence wish to publish it.

Closely related to this is the upsurge in the publication of specialized professional and postgraduate-level books, both those that concern the religious aspects of applied work and those that are handbooks on a specialized topic. For example, in 1996 the APA launched its book series on religious issues in clinical practice and shortly thereafter published a lead article on religion in the *APA Monitor* (Clay 1996). This so far has produced comprehensive handbooks focusing on religion and clinical practice (Shafranske 1996), spiritual strategy for counseling and psychotherapy (Richards & Bergin 1997), psychotherapy with religiously diverse people (Richards & Bergin 2000), and spirituality and treatment (Miller 1999). The same trend is occurring in psychiatry (Bhugra 1996, Boehnlein 2000) and from the perspective of particular theoretical approaches including rational emotive behavior therapy and psychodynamics (Malony & Spilka 1991). Finally, comprehensive handbooks and monographs have appeared on religious experience (Hood 1995) and conversion (Malony & Southard 1992, Rambo 1993), on

religion and mental health (Koenig 1998) and physical health (Koenig et al. 2001, Plante & Sherman 2001), cognitive science (Andresen 2001), children's religious cognition (Rosengren et al. 2000), emotion (Corrigan et al. 2000), and spirituality in organizations (Giacalone & Jurkiewicz 2002). This impressive body of material has emerged in less than a decade and documents the increasing attention to spirituality and religion in diverse subfields of psychology.

Progress in Conceptualizing Religion and Spirituality

Our review of developments within substantive areas of the psychology of religion begins with the swelling literature on various meanings that the terms religion and spirituality have taken on. In order for progress to occur in a scientific discipline, there must be a minimum of consensus concerning the meaning of core constructs and their measurement. Agreement on the meaning of spirituality and religion is in short supply, as the religious landscape in the broader culture and in psychology is changing with a new breed of spirituality that is often distinct from traditional conceptions of religion (Hill 1999). Adding to the mayhem, religious and spiritual variables are increasingly being included in experimental and epidemiological studies. Yet how religion and spirituality are conceived and measured vary from study to study.

Over the past decade, there has been arguably more print devoted to conceptualizing religion and spirituality than to any other topic in the psychology of religion. It has become fashionable, both culturally and in the scientific literature, to differentiate between the spiritual and the religious. Psychologists have exerted as much effort as anyone debating the meaning of these terms. The noun "spirit" and the adjective "spiritual" are being used to refer to an ever increasing range of experiences rather than being reserved for those occasions of use that specifically imply the existence of nonmaterial forces or persons. Conceptions of spirituality do not always have a transcendent reference point, a fact that has led to much confusion over its meaning in research contexts. Most contemporary meanings of spirituality do distinguish between religious spirituality, natural spirituality, and humanistic spirituality. Elkins (2001), a vocal proponent of humanistic-oriented spirituality, offers six qualities of spirituality: Spirituality is universal; it is a human phenomenon; its common core is phenomenological; it is our capacity to respond to the numinous; it is characterized by a "mysterious energy" and its ultimate aim is compassion. It is unclear how these qualities would translate into an empirical research program on spirituality, or whether conceptions this broad are even thematically in keeping with the origins of the term. Careful linguistic analyses and precise operational definitions of spirituality need to be emphasized (Moberg 2002).

There has also been no shortage of attempts to define religion. One of the best and simplest definitions to appear in recent years was offered by Dollahite (1998), who defined religion as "a covenant faith community with teachings and narratives that enhance the search for the sacred and encourage morality" (p. 5). Religions are rooted in authoritative spiritual traditions that transcend the person

and point to larger realities within which the person is embedded. Spiritualities may be contextualized within faith communities though they need not be. Whereas some have argued that the movement toward spirituality represents a movement away from traditional religion (Elkins 2001), others contend that the increased emphasis on spirituality indicates an increased respect for the inner, contemplative practices of traditional religious systems (Hill et al. 2000, Wuthnow 1998).

Zinnbauer et al. (1999) and Hill et al. (2000) systematically reviewed the evolving meanings of the terms religion and spirituality. Achieving some degree of definitional clarity is desirable, though not necessarily essential for scientific progress and the establishment of a cumulative knowledge base. After all, many disciplines have failed to provide a core consensual definition and have flourished in spite of definitional lacunae. The schism between religion and spirituality is a recent occurrence (Hill et al. 2000) and the two concepts are as much identified with their overlap as with what divides them. Zinnbauer et al. (1999) posited "a search for the sacred" as the common ground between religion and spirituality. They suggest that a dynamic view of spirituality and religion centered on a search process offers considerable potential for understanding the influence of the spiritual and religious realm in everyday life. The sacred core is what is central to both religious and spiritual experience. Building upon this definition, Pargament (1999) has argued that conceiving of spirituality in terms of an ability to imbue everyday experience, goals, roles, and responsibilities with sacredness opens new avenues for empirical exploration. For example, Mahoney et al. (1999) found that when marital partners viewed their relationship as imbued with divine qualities, they reported greater levels of marital satisfaction, more constructive problem solving behaviors, decreased marital conflict, and greater commitment to the relationship, than couples who did not see their marriage in a sacred light. Similarly, Tarakeshwar et al. (2002) found that a strong belief that nature is sacred was associated with greater proenvironmental beliefs and a greater willingness to protect the environment. This finding is notable in that other studies have found conventional measures of religiousness to be negatively associated with pro-environmental attitudes (Kanagy & Willits 1993).

One of the most important papers to appear on the topic is the review by Hill and associates (Hill et al. 2000). On the basis of both historical considerations and a growing empirical literature, the authors caution against viewing spirituality and religiousness as incompatible and suggest that the common tendency to polarize the terms simply as individual versus institutional or "good" versus "bad" is not fruitful for future research. Also cautioning against the use of restrictive, narrow definitions or overly broad definitions that can rob either construct of its distinctive characteristics, the authors propose a set of criteria that recognizes the constructs' conceptual similarities and dissimilarities. Both religion and spirituality include the subjective feelings, thoughts, and behaviors that arise from a search for the sacred. The term "search" refers to attempts to identify, articulate, maintain, or transform. The term "sacred" refers to a divine being, divine object, ultimate reality, or Ultimate Truth as perceived by the individual (p. 68). However, religion may or

may not also include the search for nonsacred goals such as social identity or health in the context the search for the sacred, as well as prescribing rituals that facilitate a search of the sacred that are validated and supported by a faith community. Hill et al. (2000) also reviewed a number of recent studies that have empirically examined people's self-descriptions as religious or spiritual (e.g., Zinnbauer et al. 1997). The general findings of these studies is that most people describe themselves as both religious and spiritual, a finding that supports Hill et al.'s claim that the recent emphasis on spirituality represents an expanding conception of religion rather than a postmodern replacement of it.

Progress in Measuring Spiritual and Religious Constructs

Nearly 20 years ago the author of an influential article on the psychology of religion contended that measurement is both the "boon" and "bane" of the psychology of religion (Gorsuch 1984) and argued for a moratorium on new measures of religiousness. Textbooks on psychometric theory state that the major problem in psychology is that of measurement. Measurement is fundamental to scientific progress. Major advances in scientific disciplines are typically preceded by major breakthroughs in measurement methods. The psychology of religion, like other fields of scientific inquiry, will progress neither slower nor faster than allowed by current measurement instruments. The 1980s and 1990s saw an explosion of new inventories in the psychology of religion. With this rapid growth, the need for an authoritative guide to their use has become more important than ever. In recent years private foundations and governmental agencies have commissioned panels of experts to identify the key dimensions of religiousness/spirituality and to recommend instruments for their measurement in basic and applied research. The objective of these efforts, and this chapter, is to make researchers and mental health professionals aware of the existence of pertinent measures as they design their studies and interventions. Only then will needless duplication of scales be avoided, and more importantly, progress will accelerate as cumulative databases are compiled and integrated with theory through programmatic research.

A recently published authoritative reference volume (Hill & Hood 1999) provides detailed information on over 100 standardized measures of religiousness. These are grouped into 17 major clusters including religious beliefs and practices, religious attitudes, religious values, religious development, religious orientation, religious commitment and involvement, spirituality and mysticism, forgiveness, religious coping, and religious fundamentalism. Whereas familiar measures often employed in social scientific research on religion are included (e.g., intrinsic and extrinsic religiosity), so too are less widely accessible scales that tap constructs of interest in and of themselves (e.g., images of God, spiritual maturity, and attitudes toward death), and that may also have a bearing on the well-being and health outcomes being increasingly studied by scientists and health professionals. Work is already well under way on a companion volume focused primarily on measures of spirituality.

Slater et al. (2001) described recent developments in the measurement of spiritual and religious constructs including a review of several new measures of spirituality that do not appear in the Hill & Hood compendium. They advocate research that examines the convergence of multiple measures of spirituality and religiousness in accordance with theoretical frameworks. A good example of this is the article by MacDonald (2000), who examined the latent factor structure among 11 measures of spirituality. He identified 5 dimensions that underlie measurement-based spirituality: cognitive orientation towards spirituality, an experiential/phenomenological dimension, existential well-being, paranormal beliefs, and general religiousness.

RELIGION AND EMOTION: THE AFFECTIVE BASIS OF SPIRITUALITY

The connection between religion and emotion is a long and intimate one. Religion has always been a source of profound emotional experience. Jonathan Edwards described the function of religious emotions in his theological classic *A Treatise Concerning Religious Affections* (1746/1959). Edwards was so struck by the evidentiary force of emotion that he made it a cornerstone of his theology. Love, gratitude, and thankful joy displayed toward God were among the signs of genuine spiritual experience, according to Edwards. A review of his contributions (Hutch 1978) suggests that he can still be read with profit.

Watts (1996), Hill (1999), and Hill & Hood (1999) trace historical developments on the association between religious experience and feeling states. Both Watts and Hill have been vociferous in calling for a greater awareness of the intimate and reciprocal relationships between the psychology of religion and the psychology of emotion and identify several fruitful areas of research that can inform and enrich both fields. An important but rarely cited book on religious ways of knowing (Watts & Williams 1988) devotes an entire chapter to religious approaches to emotion regulation. In a similar vein, Schimmel (1997) historically documents Christian and Jewish teachings on the mastery of envy, anger, pride and other potentially destructive emotions. Averill (1996) suggests that fruitful dialogue might involve a speculation on emotions in an afterlife, an enterprise that might link with social psychological research on affective forecasting (Gilbert et al. 1998).

Watts (1996) distinguishes between two main notions about the role of emotions in religious life: The charismatic movement stresses the cultivation of intense positive emotions and their importance in religious experience and collective religious rituals (see also McCauley 2001), whereas the contemplative tradition stresses a calming of the passions and the development of emotional quietude. In addition to these two approaches to regulating emotions, there is the ascetic view (Allen 1997), which links religion with greater awareness of emotion (possible emotional intelligence, to use a contemporary term) and the creative expression of emotion. Emotional regulation techniques that have their rationales in religious traditions

can modulate everyday emotional experience (Schimmel 1997, Watts 1996), providing spiritual rationales and methods for handling problematic emotions such as anger, guilt, and depression. Positive emotional benefits have been reported for Zen meditation (Gillani & Smith 2001) and the cultivation of transpersonal states long associated with spiritual and religious traditions (McCraty et al. 1998). The literature on emotion regulation in adulthood (e.g., Gross 2002) might be mined to see what it offers the psychology of religion; conversely, the field of emotion research might profit from a greater awareness of spiritual and religious influences on felt emotions (Hill 1999). Silberman (2003) suggests three ways in which religion as a meaning system affects emotions. First, religion prescribes appropriate emotions and their level of intensity. Second, beliefs about the nature and attributes of God may affect emotional well-being, and third, religion offers the opportunity to experience a uniquely powerful emotional experience of closeness to the sacred.

A debatable issue continues to be the uniqueness of emotions that are labeled as religious. Are these a separate class of emotions or simply ordinary emotions felt in religious contexts or elicited through religious rituals such as prayer and worship? Advances in philosophy of mind might be helpful here. Murphy (1998) recently argued that religious experience supervenes on ordinary experience, in a top-down, causally efficacious fashion. What makes religious emotion religious are ordinary felt emotions under circumstances that make it apparent to the person that God or a higher power is involved. In d'Aquili & Newberg's (1999) neurotheological approach, experiences of the sacred are partially mediated by the "emotional value operator" function of the mind. Neuroscience research of religious experience has tended to focused on extraordinary spiritual experiences rather than more routine religious experiences (Brown & Mathew 2001), so relatively little is known about the brain's role in everyday religious emotions. Advances in the affective sciences will likely provide new ways of thinking about religious emotions and might eventually impact psychology of religion research.

Unfortunately, empirical work on emotion within a religious or spiritual context has lagged behind theoretical writings of a largely speculative nature. There are only a handful of studies examining emotion and religion/spirituality, and none speak to the thorny issue of distinguishing religious from nonreligious emotions. Samuels & Lester (1985) found that, in a small sample of Catholic nuns and priests, out of 50 emotions, love and gratitude were the most frequently experienced toward God. Another study employed a very different methodology in studying the relationship between emotion and religion. Mayer (1994) classified emotion terms in the books of the Hebrew Bible and examined changes in the frequency of occurrence over the eight-century period during which the books were written. The primary finding was that over time, references to happiness increased; no other emotions were shown to systematically increase or decrease. Although he considers a number of alternative hypotheses, Mayer suggests that this finding can be taken as evidence of the positive psychological benefits of religious culture.

McCullough et al. (2002) found that people who reported high levels of spirituality reported more gratitude in their daily moods, as did people higher in

religious interest, general religiousness, and intrinsic religious orientation. Interestingly, however, extrinsic, utilitarian religious orientation and quest-seeking religious orientation were not significantly correlated with the amount of gratitude in daily mood. These findings suggest that people high in conventional forms of religiousness, especially people for whom religion is a fundamental organizing principle (i.e., people high in intrinsic religiousness) and people who report high levels of spiritual transcendence, experience more gratitude in their daily moods than do their less religious/spiritual counterparts. The authors suggest that the presence of gratitude may be a positive affective hallmark of religiously and spiritually engaged people, just as an absence of depressive symptoms is a negative affective hallmark of spiritually and religiously engaged people. This study is one of few attempts to examine the daily emotional lives of spiritual and religious individuals.

The beneficial effects of religiousness on health are well documented. We define religiousness here as a person characteristic, as a belief and meaning system that is stable over time and manifested across diverse situations. Research is just beginning to unravel the complex causal mechanisms responsible for these relationships between religiousness and health endpoints. One particularly promising explanation might involve the experience of religiously engendered emotions such as hope, love, forgiveness, and gratitude (Ellison & Levin 1998). Given that expressions of praise and thanksgiving are key components of religious worship, the physiological effects of gratitude hold promise for understanding religion's impact on health, perhaps even as a mediator of the robust association between religiousness and physical health. George et al. (2000) state that a high priority for future research on spirituality and health is the pursuit of an "epidemiology of spiritual experience" (p. 113) and contend that spiritual experience is the mostignored dimension of spirituality. Presumably this would include an analysis of the frequency and intensity of religious emotions in daily life. In this vein another promising research program has begun to explore the emotion of "awe" in both its religious and nonreligious contexts (Keltner & Haidt 2002).

The Return to Virtue

The study of virtue is making a comeback in psychology and is at the nexus of the psychology of religion, personality psychology, moral philosophy, and the psychology of emotion (Hill 1999, Snyder & McCullough 2000). The positive psychology movement (Seligman & Csikszentmihalyi 2000) has sought to systematically classify these strengths and human virtues into a comprehensive taxonomy (Peterson & Seligman 2002). Concepts such as forgiveness, love, hope, humility, gratitude, self-control, and wisdom appear as highly prized human dispositions in Jewish, Christian, Muslim, Buddhist, and Hindu thought and are affirmed universal principles in world philosophies and ethical systems. Basic research as well as interventions to cultivate these virtues are well under way and have been yielding fruit. Forgiveness has been an especially vigorous research area, and recent research is reviewed below. A special issue of the *Journal of Social and*

Clinical Psychology (McCullough & Snyder 2000) was devoted to a contemporary appraisal of several virtues (hope, humility, gratitude, self-control, spirituality, forgiveness, wisdom, and love), highlighting their links to physical and psychological well-being. The capstone article by Schimmel (2000) explains how those virtues (and their corresponding vices) were conceptualized historically in classical and religious understandings of human nature.

Sandage & Hill (2001) recently articulated an outline of the construct of virtue by drawing on moral philosophy and recent social science research related to virtue. They suggest six dimensions for the definition of virtue. These include the understanding that virtues: (a) integrate ethics and health; (b) are embodied traits of character; (c) are sources of human strength and resilience; (d) are embedded within a cultural context and community; (e) contribute to a sense of meaningful life purpose; and (f) are grounded in the cognitive capacity for wisdom. Perhaps the most significant point of tension is whether virtues are construed as universal or culturally embedded. These categories are not necessarily mutually exclusive. It seems possible that a particular virtue (e.g., forgiveness) might be universally valued but still locally embedded in specific cultural institutions and rituals. This would mean that forgiveness might be expressed or even defined differently in various cultural contexts and communities. Individualistic models of forgiveness would tend to construe forgiveness as a personal decision or choice, whereas individuals in collectivistic cultures would tend to operate according to strongly proscribed social norms. The overwhelming emphasis in contemporary Western psychological literature is on forgiving others, and there is a relative paucity of literature on repentance (Exline & Baumeister 2000) and seeking forgiveness from others (Sandage et al. 2000).

Research programs have been rapidly developing around several specific virtues. We focus on three that have roots in each the major religions of the world: gratitude, forgiveness, and humility.

GRATITUDE Gratitude has been defined as "the willingness to recognize the unearned increments of value in one's experience" (Bertocci & Millard 1963, p. 389) and "an estimate of gain coupled with the judgment that someone else is responsible for that gain" (Solomon 1977, p. 316). At its core, gratitude is an emotional response to a gift. It is the appreciation felt after one has been the beneficiary of an altruistic act. Some of the most profound reported experiences of gratitude can be religiously based or associated with reverent wonder toward an acknowledgment of the universe (Goodenough 1998) including the perception that life itself is a gift. In the great monotheistic religions of the world the concept of gratitude permeates texts, prayers, and teachings. Worship with gratitude to God for the many gifts and mercies are common themes, and believers are urged to develop this quality. A religious framework thus provides the backdrop for experiences and expressions of gratitude.

McCullough and colleagues (McCullough et al. 2001) reviewed the classical moral writings on gratitude and synthesized them with contemporary empirical

findings. They suggest that the positive emotion of gratitude has three moral functions: It serves as (a) a moral barometer (an affective readout that is sensitive to a particular type of change in one's social relationships, the provision of a benefit by another moral agent that enhances one's well-being), (b) a moral motivator (prompting grateful people to behave prosocially), and (c) a moral reinforcer (which increases the likelihood of future benevolent actions). McCullough et al. (2002) found that measures of gratitude as a disposition were positively correlated with nearly all of the measures of spirituality and religiousness, including spiritual transcendence, self-transcendence, and the single-item religious variables. The grateful disposition was also related to measures of spiritual and religious tendencies. Although these correlations were not large (i.e., few of them exceeded r =0.30), they suggest that spiritually or religiously inclined people have a stronger disposition to experience gratitude than do their less spiritual/religious counterparts. Thus, spiritual and religious inclinations may facilitate gratitude, but it is also conceivable that gratitude facilitates the development of religious and spiritual interests (Allport et al. 1948) or that the association of gratitude and spirituality/religiousness is caused by extraneous variables yet to be identified. The fact that the correlations of gratitude with these affective, prosocial, and spiritual variables were obtained using both self-reports and peer reports of the grateful disposition suggests that these associations are substantive and not simply the product of onemethod biases in measurement. This study may be also be useful for explaining why religiously involved people are at a lower risk for depressive symptoms and other mental health difficulties.

The concept of forgiveness has been a topic of philosophical and **FORGIVENESS** theological inquiry for thousands of years. Indeed, most religious accounts of optimal human functioning include the capacity to seek forgiveness and grant forgiveness as key elements of the well-functioning human personality. Forgiveness as a contemporary psychological or social science construct has also generated popular and clinical interest and for the most part has been considered apart from the psychology of religion by mainstream psychology (for reviews, see Enright & Fitzgibbons 2000, Fincham 2000, McCullough et al. 2000, Witvliet et al. 2001). The scientific literature on forgiveness is growing rapidly across a number of areas of psychology. Research on forgiveness has focused primarily on four themes: (a) developing measures of dispositional forgiveness (Berry et al. 2001, Brown et al. 2001), (b) investigating the psychophysiological correlates and health consequences of forgiveness (Berry & Worthington 2001, Farrow et al. 2001, Seybold et al. 2001, Toussaint et al. 2001, Witvliet et al. 2001), (c) exploring the dispositional and situational correlates of forgiveness (Maltby et al. 2001, McCullough et al. 1997, Mullet et al. 2002, Sandage et al. 2000), and (d) examining the mental health and interpersonal benefits of forgiveness (e.g., Coyle & Enright 1997, Huang & Enright 2000). Few studies have examined links between religion and forgiveness (for exceptions see Edwards et al. 2002, McCullough & Worthington 1999, Wuthnow 2000). An authoritative volume (McCullough et al. 2000) covers

theological perspectives, basic psychological processes, and applications in clinical and counseling contexts. The chapter by Rye and associates in the McCullough et al. 2000 volume is a fascinating and enlightening roundtable discussion of forgiveness in Jewish, Christian, Islamic, Buddhist, and Hindu traditions.

There has been limited empirical research on forgiveness published to date that has investigated: (a) forgiveness in non-Western contexts (for valuable exceptions, see Huang & Enright 2000, Park & Enright 1997) or (b) ethnic or cultural variables related to forgiveness. McCullough et al. (2000) noted the significance of this problem, stating,

The field [of forgiveness research] still lacks a thorough understanding of the influences of religion, culture, and life situation on people's understandings and experiences of forgiveness. Without addressing religious, cultural, and situational variations, scientific notions of forgiveness are likely to be disconnected from lived experience. (p. 10)

McCullough (2001) makes several recommendations for future research and theory on forgiveness. These include the need for a greater focus on psychological mechanisms that allow dispositionally inclined people to forgive transgressions against them, the need to examine contextualized goals and strivings (Emmons 2000) and appraisals of these goals, and the need for more sophisticated theorizing on the place of forgiveness within broader models of the person. Important clues might be gleaned from the self-regulation literature, particularly with regard to how religious ideologies that emphasize forgiveness can become translated into effective thought-action sequences and then protected from competing intentions (Emmons et al. 1993). With regard to the place of forgiveness in personality, Ashton & Lee (2001) recently posited that forgiveness/nonretaliation is one of three major traits that underlie prosocial tendencies and can account for individual differences in the major dimensions of agreeableness and emotional stability.

HUMILITY Since medieval times, pride has been one of the deadly sins, and some have argued that pride is the parent of all the vices (Schimmel 1997). Humility, as the antidote to pride, is the realistic appraisal of one's strengths and weaknesses—neither overestimating nor underestimating them. Overall, humility is characterized by an accurate assessment of one's strengths and weaknesses, thinking oneself no better or no worse than others, and being open to new ideas and new information (Tangney 2000). There is little direct research on humility. Researchers who have advocated for the benefits of humble self-appraisals have done so by pointing to the destructive consequences of pride, narcissism, and defensively high self-esteem. In an extensive review of the self-esteem literature Baumeister (1998, Baumeister et al. 1996) found that when people focus directly on enhancing how they see themselves, an artificially heightened and "dark side" of self-esteem emerges. Bushman & Baumeister (1998) found that people who had the highest opinion of themselves were also the most aggressive after being criticized for the poor quality of a written essay. Those with high self-esteem are also more likely to be antagonistic if their

view of themselves is threatened, such as being told that one has failed an aptitude test (Heatherton & Vohs 2000). In response to such findings, Baumeister (1998) and Baumeister et al. (1996) concluded that the claims that enhancing self-esteem was the cure to many societal ills was unsupported.

There is an urgent need for tools to measure humility and for studies that examine its real-world consequences. Too much of what is assumed about humility is inferred from research on related constructs. Tangney (2000) described the challenges in developing self-report measures of humility. In a cleverly designed experiment Exline et al. (2000) found that writing about a time in which they felt humble enabled participants to delay defecting in a Prisoner's Dilemma game, relative to both a pride and a control condition. Rowatt et al. (2002) operationalized humility as the difference between individual's evaluations of themselves on positive attributes and their evaluations of others on those same attributes. Evidence was found for a "holier than thou effect": Participants rated themselves to be more adherent to biblical commandments than others, a tendency that was positively correlated with intrinsic religiousness. This general evaluation bias also held for nonreligious attributes, leading the authors to conclude that religious individuals may not necessarily adhere to the dictums of their faith to be humble in comparison to others.

PERSONALITY AND RELIGION

Personality psychology has had a longstanding relationship with the psychology of religion. Kirkpatrick (1999) noted that personality psychology provides a natural home for the study of religion and spirituality in that a concern with the transcendent is an inherent part of what it means to be human. Emmons (1999) argued that personality theory and theology ought to be natural allies; both are concerned, ultimately, with what it means to be a human being. Much progress has been made at the interface of personality psychology and the psychology of religion, as personality researchers from diverse theoretical positions have begun to view religion as a fruitful topic for empirical study. A recent special issue of the *Journal of Personality* (Emmons & McCullough 1999) highlighted diverse ways in which religious and spiritual issues impact personality traits and processes and vice-versa.

Evidence is accruing that spirituality may represent a heretofore unacknowledged sixth major dimension of personality (MacDonald 2000, Piedmont 1999a). Other recent research has similarly noted that spirituality and religiousness are omitted from structural models of personality that are developed around the five factor model (FFM) (Saucier & Goldberg 1998). Piedmont (1999b) demonstrated the value of the FFM for advancing the scientific study of religion. He suggests that the FFM can provide an empirical reference point for evaluating the development of new measures of religiousness and for evaluating the meaning of existing measures. Ozer & Reise (1994) advise that personality researchers routinely correlate their particular measure with the FFM. Given the proliferation of measurement instruments in the psychology of religion, researchers would do well to heed this advice.

The FFM offers a starting point for exploring the rela-RELIGION AND THE FFM tionship between religiousness and personality functioning. The FFM is an empirically validated and comprehensive taxonomy of individual differences that has been validated cross-culturally (see Digman 1990, McCrae & Costa 1999). There is a growing literature on the Big Five traits and religiousness. MacDonald (2000) found somewhat different patterns of correlations across the Big Five depending upon the domain of spirituality examined. A factor labeled "cognitive orientation toward spirituality" was associated with extraversion, agreeableness, openness, and conscientiousness, whereas an experiential form of spirituality was related to extraversion and openness only. A recent meta-analytic review (Saroglou 2002) reported that religiousness is consistently associated with high agreeableness and conscientiousness and low psychoticism (in Eysenck's model), whereas it is unrelated to the other Big Five traits. One other generalization that appears warranted is that openness tends to be negatively correlated with more fundamentalist measures of religiousness. McCrae & Costa's (1999) model of personality may prove useful for understanding how basic trait tendencies are channeled into characteristic adaptations that include culturally conditioned religious and spiritual goals and attitudes.

New Units of Analysis from Personality Psychology

Personality psychology can introduce new units of analysis for empirically examining religiousness and spirituality in people's lives. Here we describe two recent examples.

Spiritual transcendence is "the capacity of individ-SPIRITUAL TRANSCENDENCE uals to stand outside of their immediate sense of time and place and to view life from a larger, more objective perspective. This transcendent perspective is one in which a person sees a fundamental unity underlying the diverse strivings of nature" (Piedmont 1999a, p. 988). In developing the spiritual transcendence scale (STS) a consortium of theological experts from diverse faith traditions including Buddhism, Hinduism, Quakerism, Lutheranism, Catholicism, and Judaism was assembled. This focus group identified aspects of spirituality that were common to all of these faiths. The resulting items were analyzed within the context of the FFM and were shown to constitute an independent individual-differences dimension. The STS manifested a single overall factor comprised of three "facet" scales: prayer fulfillment, a feeling of joy and contentment that results from personal encounters with a transcendent reality (e.g., "I find inner strength and/or peace from my prayers or meditations"); universality, a belief in the unitive nature of life (e.g., "I feel that on a higher level all of us share a common bond"); and connectedness, a belief that one is part of a larger human reality that cuts across generations and across groups (e.g., "I am concerned about those who will come after me in life"). The STS evidenced incremental validity by significantly predicting a number of relevant psychological outcomes (e.g., stress experience, social support, interpersonal style) even after the predictive effects of personality were removed (Piedmont 1999a). For the STS to be shown to capture a universal aspect of spirituality, it would be necessary to evidence that the instrument remains reliable and valid in culturally diverse, religiously heterogeneous samples.

Piedmont & Leach (2002) have already documented the utility of the STS in a sample of Indian Hindus, Muslims, and Christians. Support was found for two of the facet scales and the overall domain (connectedness was not found to be reliable). The STS was presented in English, a second language for these participants. This may have created difficulties in understanding the terminology or the exemplars used, as items lacked relevance in this culture. Nonetheless, these data highlight the value of cross-cultural research on spirituality and show the STS to reflect spiritual qualities relevant across very different religious traditions. However, Moberg (2002) doubts that valid, universal measures of spirituality can be constructed because of differing conceptions of spirituality in different religious traditions. The particularism versus universalism distinction that he identifies is likely to occupy psychologists of religion for some time to come.

ULTIMATE CONCERNS Yet another way to conceptualize spirituality is in terms of goals or strivings, or what Emmons and colleagues have called "ultimate concerns" (Emmons et al. 1998, Emmons 1999). Emmons (1999), following Tillich (1957) among others, argued that both religion and spirituality deal with people's ultimate concerns and developed a research program to identify ultimate concerns and their role in human personality and subjective well-being. A religious perspective can illuminate the origins of some of the most profound human strivings. Religions, as authoritative faith traditions, are systems of information that provide individuals with knowledge and resources for living a life of purpose and direction. Religion and goals are intertwined in human experience. One of the functions of a religious belief system and a religious world view is to provide "an ultimate vision of what people should be striving for in their lives" (Pargament & Park 1995, p. 15) and the strategies to reach those ends. Religions recommend the ultimate goal of binding with the sacred and prescribe rituals for its realization. Emmons et al. (1998) found that not only is it possible to reliably assess the search for the sacred in personal goals, but that individual differences in sacred goals predicted well-being more strongly than any other category of striving that has been studied, exceeding those for intimacy, power, or generativity goals. Emmons (1999) argues for a more inclusive role of religion and spirituality within personality and motivational psychology.

As our review suggests, researchers have made substantial progress in uncovering some basic facts about the personality contours of religiousness. Missing from much of the empirical exploration of personality correlates of religiousness is an exploration of the underlying mechanisms responsible for the observed associations. We do not yet know whether personality influences the development of religiousness (e.g., the tendency to strive for the sacred, to ask existential questions about one's place in the cosmos), whether religiousness influences personality

(as research on personal goals suggests), or whether personality and religiousness share common genetic or environmental causes. Longitudinal data on the relationship between personality and religiousness are sorely needed (McFadden 1999), as are research methodologies for studying the direction of causation between religion and personality. We eventually need to get beyond correlating lists of personality traits with measures of spirituality/religiousness. Waller et al. (1994) sought to identify personality traits that predicted entry into and duration of involvement in an evangelical "disciple-making training course." Disciple makers scored significantly higher on the higher-order factor of constraint (reflecting high harmavoidance, high traditionalism, and high self-control); this factor correlates highly with Big Five conscientiousness. Furthermore, after 24 months, participants with low harmavoidance and low aggression scores were likely to remain in the program, leading the authors to conclude that "personality is a powerful determinant of involvement duration as a disciple-maker" (p. 190). It is especially fascinating that although participants high in harmavoidance initially were attracted to the program, those low in the trait were more likely to remain over time. This dynamic trend would not have been observed by simply examining the correlation between personality and religious activity at a single point in time.

Spiritual Transformation

Another vigorous area of research is that of religious conversion or spiritual transformation. The effects of religious conversion on personality change was one of the first topics studied with empirical research methods when psychology emerged as a science over one hundred years ago (James 1902, Starbuck 1899). The term spiritual transformation is used here to denote what is understood widely in the psychology of religion literature as a "conversion experience." Some researchers have begun to use the term "quantum change" to highlight the profound nature of this religious experience (Miller & C'de Baca 2001). However, it must be noted that one's spiritual transformation can be profound whether it occurs gradually or via a sudden experience. Much of the contemporary scientific psychological research examines the relationship between the self or personality and spiritual transformation. For example, Zinnbauer & Pargament (1998) gave a group of spiritual converts, a group who experienced gradual religious change, and a group of religious adherents who reported no religious change (all subjects were Christian undergraduate students), measures of stress, life events, motivation for change, and sense of self. The authors posited that spiritual conversion should lead to radical personal change. However, they found that self definition changed markedly for both spiritual and gradual converts. In addition, the spiritual converts reported more preconversion stress and perception of personal inadequacy, more improvement in their personal competence, and more spiritual experiences after conversion.

Kirkpatrick (1997, 1998) has published two longitudinal studies of religious conversion. In his 1997 study, 146 women readers of the *Denver Post* were surveyed approximately 4 years apart (times T1 and T2, respectively) about a variety of

religious commitments. Of concern was whether different adult attachment styles predicted religious commitment. He found that when religion at time T1 was statistically controlled, those with an insecure-anxious or an insecure-avoidant adult attachment style were more likely than those with a secure attachment style to report finding a new relationship with God by time T2. Insecure-anxious subjects were more likely than those who had secure or ambivalent attachments to report having had a religious experience or a religious conversion during this time period. These results were interpreted as supporting the compensation hypothesis in attachment theory: God serves as a substitute attachment figure for those having difficulty forming human bonds. These findings were replicated and extended in a follow-up study (Kirkpatrick 1998) in which college students were assessed for their attachment styles and religiousness approximately 4 months apart.

Based upon their systematic review of the literature, Paloutzian et al. (1999) argue that spiritual transformation experiences appear to have minimal effect on the "elemental" functions of personality (the Big Five). However, they suggest that spiritually transforming experiences can result in profound life changes at the mid-level functions of personality such as goals, feelings, attitudes, and behaviors. Indeed, these researchers posit that "self-defining" personality functions (such as identity, life meaning) do change dramatically after a spiritual transformation. Few studies published to date are immune from methodological shortcomings such as reliance on cross-sectional, retrospective designs and near total reliance on measures of self-perceived change.

CONCLUSIONS

Although it is clear that the psychology of religion is alive, well, and growing, two questions linger: First, is the rest of psychology embracing its knowledge and data and drawing the relevant connections to its own material as this review would suggest? Second, what is the psychology of religion's current paradigm and what paradigm would have to describe it if its contribution is to unfold to the fullest degree?

The response to the first question depends upon the receptiveness of psychologists in other areas. Emmons (1999) examined this question and put the answer this way:

...two recent, comprehensive handbooks of personality (Hogan et al. 1997, Pervin 1990) fail to include religion as a topic of inquiry. A lone reference that appears in one (Megargee 1997) bemoans this very neglect of the topic. Nor does the *Handbook of Social Psychology* (Gilbert et al. 1997) devote any space whatsoever to religion and social behavior. Out of a total of over 3,000 pages in these three presumably comprehensive handbooks, less than 1 page discusses religious influences on personal and social behavior (p. 12).

It appears that although there is research in the psychology of religion that is tied to almost every area of research in general psychology, only a portion of the field, especially that concerned with clinical applications and health psychology, has begun to incorporate the knowledge from the psychology of religion into its own information base and practices.

As to the paradigm issue, Gorsuch (1988) seemingly reluctantly concluded that even as late as the mid 1980s, when other areas of psychology had gone beyond trying to find the purest measure for a concept, the psychology of religion was still in a *measurement paradigm*. Although a definitive compendium of psychology of religion measures has now been published (Hill & Hood 1999) and new measures of important variables continue to appear from time to time [e.g., religious maturity (Leak & Fish 1999), faith development (Leak et al. 1999), spiritual strivings (Emmons 1999)], the evidence indicates that the field has now gone beyond focusing on measurement as its primary concern. The psychology of religion has undergone a paradigm shift. It has emerged as a strong research enterprise whose topics interface almost all areas of psychology, whose scholars produce an impressive body of research, whose research will further develop internationally and cross-culturally, and whose importance is only going to increase.

There is also much to be gained from an increasing dialogue and collaboration between psychologists who specialize in religion and our colleagues in evolutionary biology, neuroscience, philosophy, anthropology, and cognitive science, so that developments in the psychology of religion take into account and build upon advances in these related scientific disciplines. This will need to be accomplished nonreductively, echoing our concerns raised above. A single disciplinary approach is incapable of yielding comprehensive knowledge of phenomena as complex and multifaceted as spirituality. We note with considerable enthusiasm exciting new developments in the cognitive science of religion (Andresen 2001, Barrett 1998, Woolley 2000), the neurobiology of religious experience (Brown et al. 1998, McNamara 2001, Newberg et al. 2001), the evolutionary psychology of religion (Boyer 2001, Kirkpatrick 1999), and behavior genetics (D'Onofrio et al. 1999). With a few exceptions, however, these approaches currently provide promissory notes, and considerably more research is needed before their full contribution can be evaluated. We are sanguine that these developments will ultimately anchor the psychology of religion as strongly in the biological sciences as in the social and clinical sciences and will yield new and scientific ways to talk about the human spirit.

We think, therefore, that the field has changed to such a degree since Gorsuch's (1988) chapter that a new concept is needed to guide it. We call it the *multilevel interdisciplinary paradigm*. This paradigm recognizes the value of data at multiple levels of analysis while making nonreductive assumptions concerning the value of spiritual and religious phenomena. It is the implementation of this paradigm that will carry the day, and this hinges on the interaction between those who study the psychology of religion and their counterparts in the rest of psychology and allied sciences. The field has made great strides in its efforts to say something important to the rest of psychology, and we think what has come before is only a platform and that the field is now poised, ready to begin.

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