## **Psychology of Religion and Spirituality**

## Sanctification of Diverse Aspects of Life and Psychosocial Functioning: A Meta-Analysis of Studies From 1999 to 2019

Annette Mahoney, Serena Wong, Julie M. Pomerleau, and Kenneth I. Pargament Online First Publication, May 6, 2021. http://dx.doi.org/10.1037/rel0000354

### CITATION

Mahoney, A., Wong, S., Pomerleau, J. M., & Pargament, K. I. (2021, May 6). Sanctification of Diverse Aspects of Life and Psychosocial Functioning: A Meta-Analysis of Studies From 1999 to 2019. *Psychology of Religion and Spirituality*. Advance online publication. http://dx.doi.org/10.1037/rel0000354



## Sanctification of Diverse Aspects of Life and Psychosocial Functioning: A Meta-Analysis of Studies From 1999 to 2019

Annette Mahoney, Serena Wong, Julie M. Pomerleau, and Kenneth I. Pargament Department of Psychology, Bowling Green State University

Starting with a study on the sanctification of marriage (Mahoney et al., 1999), Pargament and Mahoney developed two psychological scales to assess whether viewing an aspect of life as a manifestation of God (i.e., theistic sanctification) and/or imbued with sacred qualities (i.e., nontheistic sanctification) was tied to better psychosocial functioning. The current study used meta-analytic techniques to summarize the strength of correlations between sanctification and psychosocial functioning across diverse aspects of life (e.g., human body, strivings, work, marriage, and parenting). We included data from 1999 to July 2019 that were published in peer-reviewed journals (N = 49) and dissertations that had not been published (N = 14). Across these sources, we identified 66 independent cases involving positive outcomes and 43 independent cases with negative outcomes. Greater sanctification was consistently associated with greater positive psychosocial adjustment (r = .22; 95% CI = .17–.25) and less negative functioning (r = -0.10; 95% CI = .0–.05). We also compared the sanctification of close interpersonal relationships (r = 0.24, 95% CI = .20–.29) and other aspects of life (r = .16, 95% CI = .11–.22) for positive adjustment, and for negative adjustment (respective r's = -.12 and -.09, with 95% CIs of -.18 to -.06 and -.14 to -.04). Overall, these findings establish sanctification as a promising new construct for the psychology of religion and spiritually, one that holds significant implications for psychosocial functioning within multiple domains of life.

Keywords: sanctification, religion, spirituality

Over the past several decades, the field of the psychology of religion and spirituality has extensively examined linkages between the ways that people relate to God(s) and religious communities and their personal well-being (Hood et al., 2018; Paloutzian & Park, 2013; Pargament, Mahoney, et al., 2013; Pargament, Exline, et al., 2013). Starting with a study on marriage (Mahoney et al., 1999), Pargament and Mahoney (2005) offered a means to extend this body of empirical research by assessing the extent to which people perceive various aspects of life as having divine character and significance. Borrowing a term from religious studies disciplines, they labeled this perceptual process "sanctification." They operationalized this construct by creating two subscales that measured the degree to which one's marriage is viewed as (a) a manifestation of God/Higher Powers (i.e., theistic sanctification) and/or (b) imbued with sacred qualities (i.e., nontheistic sanctification). Since that time, as can be seen in Table 1, additional studies have been conducted on the sanctification of marriage and numerous additional domains, such as parenting, strivings, sexuality within marriage and nonmarital unions, one's physical body, work/career, the environment, moments in psychotherapy, and other domains (e.g., forgiveness, life as a whole, learning, and the environment).

Editor's Note. Liz Hall served as the action editor for this article.--CLP

Serena Wong (D) https://orcid.org/0000-0002-7837-6468

Julie M. Pomerleau D https://orcid.org/0000-0003-2978-7890

Given the very wide range of objects that people can view through a sacred lens, scientific literature on the sanctification spans multiple subspecialty areas in psychology. This breadth of findings can make it difficult for scholars working within distinct subdisciplines to locate and appreciate quantitative linkages between sanctification and psychosocial functioning. Thus, the primary purposes of this study were to summarize the literature on sanctification and inspire more researchers from diverse areas of expertise to examine the roles that sanctification plays within and across different domains of life. To accomplish these goals, we used meta-analytic techniques to synthesize the effect sizes of associations of sanctification with positive and negative psychosocial functioning across multiple domains. In addition, we explored whether the perceived sanctification of close human relationships yielded relatively stronger effects than the sanctification of other domains of life, given a strong emphasis in most world religions on the sanctity of interpersonal relationships (Mahoney et al., 2013).

### Sanctification Across Diverse Domains

### Theory and Measurement

Definitionally, sanctification is a process through which aspects of life are perceived as having divine character and significance (Pargament & Mahoney, 2005; Pargament et al., 2017). The phrase "divine character and significance" is, by design, an inclusive one. It encompasses the perceived embodiment of a theistic God(s) as well as nontheistic perceptions where sacred qualities often ascribed to deities, such as transcendence, ultimacy, and boundlessness, can be attached to virtually any aspect of existence (Pargament et al., 2017).

Correspondence concerning this article should be addressed to Annette Mahoney, Bowling Green State University, Bowling Green, OH, United States. Email: amahone@bgsu.edu

	ıdly.
ublishers	tted broa
allied pu	issemina
of its	o be d
or one	not to
tion o	and is
ssocia	user
ogical A	ndividual
sychol	f the ir
rican F	use o
e Amei	ersonal
by th	the p
'righted	lely for
s copy	ded so
ocument i	le is inten-
This d	This artic

 Table 1

 Studies with Associations Between Sanctification and Psychosocial Positive and Negative Adjustment

Relational or nonrelational sanctification	Domain (sanctification measure)	Citation	Sample details	Positive adjustment	Mean r	Negative adjustment	Mean r
Nonrelational	Body (MG)	Benjamins et al. (2011) <sup>a</sup>	U.S. national: 1,076 Presbyterian adults	Use of preventive health services (i.e., cholesterol screening, flu shot, or colonosconv)	03		
Nonrelational	Body (MG)	Ellison et al. (2008) <sup>a</sup>	U.S. national: 1,107 Presbyterian	Use of preventive health service	05		
Nonrelational	Body (Combined)	France (2006)*	adults New Zealand community: 108 Roman	(i.e., annual physical exam) Body self-relations, sense of self, life	.29	Psychological distress	22
Nonrelational	Body (MG, SQ)	Kopp et al. (2017)	U.S. community: 45 adolescents with cvetic fibrocis	saustaction, psychological wen-pend Nighttime sleep duration	.18	Depressive symptoms	08
Nonrelational	Body (MG, SQ)	Grossoehme et al. (2015)	U.S. community: 107 parents of children with cystic fibrosis	Treatment attitude, motivation adherence, perceived behavioral norms for airway clearance, self-efficacy, adherence intentions	.02		
Nonrelational	Body (MG, SQ)	Grossoehme et al. (2012)	U.S. community: 24 parents of children with cystic fibrosis from multiple states	Attitude toward treatment utility, self- efficacy for airway clearance, self- efficacy for aerosolized medications	.38		
Nonrelational	Body (MG, SQ)	Homan and Boyatzis (2009) <sup>b</sup>	<ul><li>(a) U.S. community: 40 older adult men from a rural area</li><li>(b) U.S. community: 87 older adult</li></ul>	Body satisfaction Body satisfaction	.50 .16	Physical appearance anxiety Physical appearance anxiety	.04 15
Nonrelational	Body (SQ)	Homan and Boyatzis (2010) <sup>b</sup>	women from a rural area U.S. community: 160 older adults from multiple community sites	Exercise, taking responsibility for one's health, untritious eating, stress	.17	Smoking	08
Nonrelational	Body (MG, SQ)	Jacobson et al. (2013)	U.S. college students: 187 from a nrivota Christian libera	management Body satisfaction, body esteem, body	60.	Body objectification, demersionalization	14
Nonrelational	Body (MG, SQ)	Jacobson et al. (2016a) <sup>c</sup>	U.S. community: 243 adults affiliated with Christian organizations	awareness Body harmony	.21	uepersonatization Depersonalization, body alienation, sexual appearance concerns	11
Nonrelational	Body (MG, SQ)	Jacobson et al. (2016b) <sup>c</sup>	U.S. community: 243 adults affiliated with Christian organizations	Body appreciation	.22	Body self-surveillance, body shame	10
Nonrelational	Body (MG, SQ)	Mahoney, Carels, et al. (2005)	U.S. college students: 289 from a Midwestern state university	Health protective behaviors, body satisfaction, physical exercise, healthy nutrition habits, disapproval of heavy smoking	.12	Preoccupation with improving appearance, unhealthy dieting practices, binge eating, alcohol use, illicit drug use, smoking, ascoricism	.08
Nonrelational	Body (MG, SQ)	Pizzigoni (2017)*	252 U.S. women, 97 with eating disorders & 155 college students			Body surveillance, internalization of appearance standards, body shame	20
Nonrelational	Collegiate sport participation (Combined)	Lynn (2009)*	U.S. college sample: 70 Division 1 athletes from Midwestern states	Investment, sportsmanship, support from family & friends, meaning, joy, hanniness, well-being	.16	caung usouce symptoms Alcohol & drug use, perceived obstacles & doubt about sports	13
Nonrelational	Dreaming (MG, SQ)	Phillips and Pargament (2002)	U.S. college students: 163 from a Midwestern state university	Stress-related growth, positive emotion	.35	Negative emotion, posttraumatic stress symptoms	.02
Nonrelational	Environment (MG)	Tarakeshwar et al. (2001)	U.S. national sample of Presbyterians a) 610 members b) 573 elders c) 1.128 clerev	Belief that human actions hurt nature, willingness to sacrifice for nature, protect environment behaviors	.09 .10 .08	Belief that humans take precedence over nature	09 17 15
Nonrelational	Learning (Combined)	Phillips and Kitchens (2016)	U.S. college students: 349 from a Pennsylvania public university	Investment in learning (i.e., commitment to education, importance of learning, investment of time and energy), study strategies (i.e., critical thinking, self- regulation) and educational outcomes (i.e., grade-point average, positive affect toward learning, stress related growth)	.14		

2

### MAHONEY, WONG, POMERLEAU, AND PARGAMENT

Mean r	21 at	.04		06 s	19	02	07	06	.06				11		36	10	09
Negative adjustment	Narcissism, fearful attachment, dismissing attachment, preoccupied attachment, impact of most negative event	Physical symptoms		Question or doubt related to striving, depressive symptoms, alcohol use, perceived obstacles	Anxiety, depression, hostility	Emotion regulation difficulties, thought suppression, antagonistic behavior	Constraints, demands, conflict with coworkers, conflict with clients, burnout, anxiety depression. negative affect	Negative affect, interrole conflict	Job insecurity and psychological distress				Revenge		Negative emotion	Self & spouse reports about conflict about sex	Self & spouse reports about conflict about sex
Mean r	.29	.01 .05	.12	.30		06	.22	.19	.20	.31	.37	.10		.21	.37	.13	.17
Positive adjustment	Purpose in life, self-esteem, secure attachment, community service attitude, social helping, social support, frequency of everyday pleasant events, enjoyment of everyday pleasant events	Self-rated health Social justice activity	Dispositional gratitude, daily gratitude	Subjective importance, commitment, expected longevity, dominates life, perceived social support, confidence, internal locus of control, meaning, joy, physical health, life satisfaction, constructive for self (coder ratings), constructive for others (coder ratings).		Information seeking behavior from people with different views of Trump	Physical health, positive affect, engagement, affective organizational commitment, perceived organizational surbort, iob satisfaction, social surport	Positive affect, satisfaction with work	Job satisfaction, centrality, organizational commitment and organizational support	Job satisfaction, affective commitment to iob, intent to leave iob (stav)	Ethical judgment	Life satisfaction, marital expectations		Role congruence, marital satisfaction	Marital quality, relationship commitment, positive emotion, bonding	Self & spouse reports of sexual satisfaction, sexual intimacy	Self & spouse reports of sexual satisfaction, sexual intimacy
Sample details	U.S. national: 113 adults	U.S. national: 2,932 nonatheist adults U.S. church: 115 Christian ministry	leaders U.S. community: 199 adults with neuronuscular diseases through a Western university mailing list	U.S. community: 150 adults from Midwestern states	U.S. college students: 268 from a public university	U.S. community (online): 252 voters	U.S. community: 104 employees from Midwest or Northeast U.S.	U.S. church: 200 Christian-affiliated working women with postcollege degrees and at least one child at home.	U.S. community (online): 467 full-time working adults experiencing job insecurity	U.S. community: 103 full-time working adults	U.S. community: 220 nonatheist adults employed for at least 1 year in the U.S.	U.S. national: 432 nonmarried individuals cohabiting or dating	U.S. college students: 123 from a large Southeastern urban university	U.S. community: 249 Evangelical Christian women	U.S. community: 1,227 married heterosexuals in Texas	U.S. community: 164 heterosexual counter during the mean of the second s	their first infant was 12 months old a) 164 Husbands b) 164 Wives
Citation	Doehring et al. (2009)	Krause et al. (2016) An et al. (2019)	Emmons and Kneezel (2005)	Mahoney, Pargament, et al. (2005)	Tix and Frazier (2005)	Wong et al. (2019)	Backus (2015)*	Hall et al. (2012)	Lucero (2015)*	Walker et al. (2008)	Walker et al. (2012)	Henderson et al. (2018)	Davis et al. (2012)	Davis et al. (2018)	Ellison et al. (2011)	Hernandez (2012) <sup>*,d</sup>	
Domain (sanctification measure)	Life (Combined)	Life (Combined) Service	(MG) Strivings (MG)	Strivings (MG, SQ)	Strivings (SO)	Trump's election (Combined)	Work (MG, SQ)	Work (MG)	Work (Combined)	Work (MG, SQ)	Work (MG)	Committed union (MG)	Forgiveness (Combined)	Marriage (MG, SQ)	Marriage (Combined)	Marriage (Combined)	
Relational or nonrelational sanctification	Both	Both Nonrelational	Nonrelational	Nonrelational	Nonrelational	Nonrelational	Nonrelational	Nonrelational	Nonrelational	Nonrelational	Nonrelational	Relational	Relational	Relational	Relational	Relational	

This document is copyrighted by the American Psychological Association or one of its allied publishers. This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

## Table 1 (continued)

3

(table continues)

SANCTIFICATION

	IIy.
shers.	broad
publis	nated
allied	ssemi
of its a	be di
one o	not to
on or	nd is 1
ociati	user and
al Ass	ual
logica	individ
sycho	the i
can P	use of
Ameri	onal 1
the /	e pers
ed by	for the
yright	olely i
s cop	ded so
nent i	inten
docur	cle is
This d	nis arti
	μŢ

# Table 1 (continued) (continued)

Mean r	15	-00	07	09		15 22	C7: L		09 20	19					00 -	60					16			
Negative adjustment	Husbands' observed negativity during conflict interactions	Wives' observed negativity during conflict interactions	Husbands' observed negativity during conflict interactions	Wives' observed negativity during	Marital conflict, verbal aggression,	staternate, avoitance		Negative problem solving—self and other		Infidelity thoughts and actions					Neoative marital quality	unforgiveness					Sex guilt			
Mean r	.19	.14	.12	.10		.32	30		02 .08		.41	37	.28	.34	17	Ì.	.21	.18		.23	.41	.26	.20	.11
Positive adjustment	Husbands' observed positivity during conflict interactions	Wives' observed positivity during conflict interactions	Husbands' observed positivity during conflict interactions	Wives' observed positivity during conflict	Global marital adjustment, perceived	DERICILIS, COLIADOLALIOII	Forgiveness, sacrifice, and commitment	Positive problem solving -self and other			Supportive dyadic coping by oneself, marital satisfaction, well-being		Compassionate love; marital satisfaction— self and other		Positive marital quality sacrifice	forgiveness	Marital satisfaction	Frequency of sex, sexual satisfaction,	sexual intimacy, marital satisfaction	Frequency of sex, sexual satisfaction, sexual intimacy, marital satisfaction 1 vear later	Sexual satisfaction	a) Gratitude, relationship satisfaction, open communication	<ul> <li>b) Gratitude, relationship satisfaction, open communication</li> </ul>	Parental functioning (investment, satisfaction, efficacy)
Sample details	U.S. community: 164 heterosexual couples pregnant with their first	child a) 164 husbands	b) 164 wives		U.S. community: 97 married	neterosexual couples with child(reff) a) 97 husbands b) 97 wives	U.S. community (online): 193 married heterosevual Christian individuals	U.S. community: 57 married heterosexual couples with children	a) 57 husbands b) 57 wives	Iranian clinic: 222 married individuals	Romanian college students: 215 married Christian Orthodox couples	in college a) 215 husbands b) 215 wives	U.S. community: 64 older Southeastern married heterosexual	couples a) 64 husbands	b) 04 WIVES II S community: 342 married coundes	with higher socioeconomic status (husband and wife reports combined)	U.S. historical black church: 30 married African American Christian individuals from KV & OH	U.S. community: 83 heterosexual	newlyweds in the Midwest	U.S. community: 67 heterosexual newlyweds in the Midwest	U.S. national: 1,614 individuals—85% heterosexual: 55% married	a) U.S. college students: 452 undergraduate reports about their mother-rohild and fatther-child relationships of their married parents	b) U.S. community: 194 parents of above undergraduate students (mothers and fathers reports combined in study)	U.S. community: 149 parents of preschoolers from a parenting program
Citation	Kusner et al. (2014) <sup>d</sup>				Mahoney et al. (1999)		Pearce (2019)*	Rauer and Volling (2015)		Reich and Kalantar (2018)	Rusu et al. (2015)		Sabey et al. (2014)		Stafford et al (2014)		Staples (2009)*	Hernandez et al. (2011)		Hernandez-Kane and Mahoney (2018)	Leonhardt et al. (2020)	Brelsford and Righi (2015)		Dumas and Nissley-Tsiopinis (2006)
Domain (sanctification measure)	Marriage (Combined)				Marriage (MG, SQ)		Marriage (MG)	Marriage (SQ)		Marriage (MG)	Marriage (MG)		Marriage (SQ)		Marriage (MG SO)		Marriage (Combined)	Sex in Marriage (Combined)		Sex in Marriage (Combined)	Sex in Committed Union (SQ)	Parenting (MG, SQ)		Parenting (Combined)
Relational or nonrelational sanctification	Relational				Relational		Relational	Relational		Relational	Relational		Relational		Relational		Relational	Relational		Relational	Relational	Relational		Relational

4

### MAHONEY, WONG, POMERLEAU, AND PARGAMENT

or nonrelational sanctification	Domain (sanctification measure)	Citation	Sample details	Positive adjustment	Mean r	Negative adjustment	Mean r
Relational	Parenting (MG)	Jang (2018)*	Korean community: 388 fathers from	Intentional fathering	.36		
Relational	Parenting (Combined)	Lynn et al. (2016)	an evangelical Christian church U.S. community: 174 fathers and children from religiously affiliated Midwestern schools	Marital quality, father-child relationship quality	.17	Interparental conflict, psychological proximity (child's wish to be closer to fathers)	.06
Relational	Parenting (SQ)	Nelson and Uecker (2018)	U.S. national sample a) 352 married mothers b) 277 married fathers c) 553 incla mothers	Parenting satisfaction	.18 .16 .40	(1)	
Relational	Parenting (MG, SQ)	Piekarek (2009)*	<ul> <li>b) U.S. community: 73 mothers of a) U.S. community: 73 mothers of college students from Marquette University</li> <li>b) U.S. community: 66 fathers of college students from Marquette University</li> </ul>	<ul> <li>a) Appropriate parent demand, acceptance, reciprocity, motivation</li> <li>b) Appropriate parent demand, acceptance, reciprocity, motivation</li> </ul>	.12	<ul><li>(a) Inappropriate control, parent mental &amp; distress</li><li>(b) Inappropriate control, parent mental &amp; distress</li></ul>	03 10
Relational	Adoption and Parenting (Combined)	Cheyne (2005)*	U.S. community: 63 adoptive parents of special needs children	Marital satisfaction	.22	Child behavior problems, parent psychological symptoms, parent-child conflict	05
Relational	Parenting (MG, SQ)	Murray-Swank et al. (2006)	U.S. community: 74 Midwestern	Nurturance, consistency, positive	.12	Verbal aggression, corporal	12
Relational	Parenting (MG)	Volling et al. (2009)	U.S. community: 110 Midwestern	Positive socialization, reparation/induction,	.20	Punisiment Punitive discipline (self and	03
Relational	Parenting (Combined)	Weyand et al. (2013)	U.S. community: 139 Midwestern	varia a moral variance (avia and avoura		Parental stress	00.
Relational	Romantic Relationship (Combined)	Fincham et al. (2010)	U.S. community: 83 Christians individuals in same-sex cohabiting			Infidelity	26
Relational	Same-sex Relationships (MG, SQ)	Lenihan (2014)*	U.S. community: 150 same-sex Christians cohabiting with their	Relationship satisfaction, personal commitment	.33	Risk of breaking up	17
Relational	Same-sex Relationships and Sex (SQ)	Phillips et al. (2017)	partner U.S. community (online): 256 same- sex couples	Relationship investment, emotional intimacy, relationship satisfaction, frequency of sex, positive affect toward sex	.30	Verbal aggression, negative affect toward sex	-00
Relational	Sexuality of Self	Claney (2018)*	U.S. college students: 204 Evangelical Christian females	Psychological wellbeing	.24		
Relational	Therapist-client relationship	Alvarado (2016)*	U.S. community: 16 psychiatric nurses and nurse assistants	Therapeutic alliance, work motivation, work meaning iob satisfaction	.40		
Relational	Therapist-client relationship (SQ+)	Pargament et al. (2014)	U.S. community: 58 mental health providers from an urban Southern city	Client gains, therapeutic relationship gains, provider gains, provider work motivation, meaning in work	.52	Provider burnout	.03
			U.S. community: 519 mental health clients from an urban Southern city	Client gains, therapeutic relationship gains, satisfaction with provider, mental health efficacy, mental health changes, working alliance. meaning in life	.54	Anxiety, depressive symptoms	-00
Relational	Expected division of household labor (MG)	Chan et al. (2014)	U.S. college students: 126 from a Christian liberal arts university	Expected division of household labor according to preference of marriage	.23		

*Note.* Under the column of sample details, "U.S. national" refers to a nationally representative sample of the type of respondent in the study. \* Source is a dissertation with unpublished data. <sup>a,b,c,d</sup> Pairs of samples with the same superscript letter were not independent of each other; thus, they were combined and treated as a single independent case in analyses. Both = combined measure of Manifestation of God and Sacred Quality; MG = Manifestation of God measure, SQ = Sacred Quality measure, SQ + Sacred Quality measure, SQ + Sacred Quality is superscript.

## Table 1 (continued)

The first empirical psychological study of sanctification focused on marriage (Mahoney et al., 1999). Notably, many religious groups hold that marriage ideally embodies an eternal union transformed by a religious ritual into a bond of ultimate importance that reflects God's presence and transcends the finite limits of ordinary time and space (Onedera, 2008). This initial study provided a conceptual template to theorize that any aspect of life could be viewed as a manifestation of God (theistic sanctification) or imbued with sacred qualities (nontheistic sanctification). The former highlights perceiving a deity(s) as being immanent within lived experiences, a perceptual process that has long been encouraged by both Western and Eastern religious traditions (Pargament et al., 2017). Nontheistic sanctification involves imbuing seemingly ordinary aspects of life with extraordinary qualities frequently associated with notions of the divine, God, and transcendent reality. Theoretically, it is useful to think of sacred qualities as prototypical "adjectives" often ascribed to divine beings that are transferred to other aspects of life; when this process occurs, objects can take on surplus significance (Pargament et al., 2017). Hypothetically, people from diverse spiritual and religious backgrounds-monotheists, polytheists, pantheists, agnostics, and atheists-could employ one or both perceptual processes to infuse their daily lives with divine meaning and significance. Furthermore, sanctification could theoretically occur for individuals who are, or are not, socialized culturally or via a religious institution(s) to view a domain of life as reflecting sacred qualities and/or a deity's presence (see Pargament et al., 2017, for fuller explication on the concept of sanctification). Notably, the proposition that something becomes sanctified through the psychological process of sanctification neither supports nor contradicts theological convictions that perceptions of sanctity correspond to ontological realities beyond peoples' minds. Finally, most empirical research to date on sanctification has been limited to the U.S. and predominantly Christian samples. More research is needed to determine cross-cultural differences that may exist between and within groups of people about the objects or experiences that are viewed as meriting sacred status.

Mahoney and Pargament initially operationalized the construct of sanctification by creating two 10-item subscales to measure the extent to which spouses viewed their marriage as being: (a) a manifestation of God (i.e., theistic sanctification) and (b) imbued with sacred qualities (i.e., nontheistic sanctification), with explicit instructions that respondents should use their personal definition of the word "God" when answering items (Mahoney et al., 1999). As indicated in Table 1, they and other researchers adapted the original and a revised measure sanctification of marriage that Mahoney and Pargament created (Mahoney et al., 2009) to assess the perceived sanctity of many other domains. Empirically, the two subscales have been moderately to highly correlated. Although the items used to assess sacred qualities do not reference deities, both theists and nontheists can endorse the sacred quality items. Also, although nontheistic sanctification may more often be endorsed by subgroups who are less likely to believe in God than the general population, such as psychologists (Delaney et al., 2007), both scales tend to be relevant and function similarly in U.S. samples. Accordingly, in this meta-analytic study, we aggregated effect sizes from the two sanctification subscales if a given study reported effects based on both subscales. More research is needed to evaluate the applicability of either scale to non-U.S., non-Christian subgroups, and non-Abrahamic faith traditions. We hope this study promotes such cross-cultural extensions.

### **Positive Psychosocial Functioning**

Theoretically, Pargament and Mahoney (2005, Pargament, Mahoney, et al., 2013) have argued that greater perceptions of sanctification of a given aspect of life can lead to a greater commitment and investment of time and energy to that domain, elicit intense emotions, and function as a powerful personal and social resource that people tap into throughout their lives. In short, people who view an aspect of life as sanctified should be highly motivated to pursue, preserve, and protect a sanctified object. For example, experiencing major life strivings as embodying God's intentions, expressing one's ultimate purposes, and eliciting profound feelings of wonder, awe, reverence, and gratitude should propel people to prioritize sacred endeavors (Mahoney, Pargament, et al., 2005; Schnitker & Emmons, 2013). Reciprocally, perceiving work as a sacred calling could provide people with inspiration, strength, support, and sustenance to draw upon in daily life or times of stress. Over time, these bidirectional and interactive mechanisms presumably would yield desirable outcomes, such as greater satisfaction and happiness derived from that aspect of life (Pargament & Mahoney, 2005; Schnitker & Emmons, 2013). In turn, positive functioning in a given domain would reinforce a person's belief that the object belongs within his or her sphere of sacred endeavors. For example, those whose marital or parenting experiences are highly satisfying may be more likely to view those relationships as sacred. In sum, we hypothesized greater sanctification would consistently be correlated with greater positive psychosocial functioning across multiple domains.

### Negative Psychosocial Functioning

In the initial study of sanctification on marriage, Mahoney et al. (1999) found greater sanctification to be tied to less frequent marital conflict and use of stonewalling and verbal aggression by one or both spouses. Pargament and Mahoney (2005) thus proposed that greater sanctification may motivate people to avoid maladaptive behavior within a given domain of life as well as resist negative impulses that would increase their own or others' psychosocial distress. Some subsequent studies suggested this is the case (e.g., Fincham et al., 2010; Jacobson et al., 2013; Leonhardt et al., 2020). Intriguingly, however, whereas greater sanctification of major life strivings was related to more joy and investment of energy in those goals, it was unrelated to depressive, anxiety, or physical health problems (Mahoney, Carels, et al., 2005). Also, using fixed-effects modeling, Kusner et al. (2014) found that sanctification of marriage increased positive, but did not inhibit negative, communication strategies between spouses during observed marital interactions. Thus, sanctification may more consistently promote positivity than limit exposure to negativity. Indeed, many faith traditions encourage people to make sacrifices for the sake of sacred objects but tend to be less clear about what to do if a sacred aspect of life becomes problematic. Especially when individuals become strongly attached to sacred objects, they may have difficulties setting limits on dysfunctional dynamics in that realm and remain in situations that compromise their own or others' well-being. One classic example includes remaining in a physically or psychologically abusive marriage because divorce would violate the sanctity of the union. In light of available research findings, we expected greater sanctification to be tied to less negative functioning based on effect sizes generated by meta-analytic analyses across multiple domains, but we anticipated that these effects may not be as robust as those of positive psychosocial adjustment.

### Interpersonal Versus Noninterpersonal Domains

As a rule, world religions place a high value on close interpersonal relationships and provide people with compelling scriptural narratives and religious rituals that envelop kinship bonds with divine meaning and significance (Mahoney et al., 2013; Onedera, 2008). For example, the formation of family relationships through religious wedding and baby naming rituals are sanctified by verbal (e.g., vows and prayers) and nonverbal behaviors (e.g., lighting candles) in a social context (e.g., clergy, family, and friends) that can elicit strong emotions (e.g., joy and trepidation). World religions likewise impart divine significance to the caretaking of youth and elders, the formation of tight friendships, the provision of emotional and instrumental social support to loved ones, and the creation of compassionate, close bonds with those in need (e.g., those who are hungry, sick, poor, imprisoned, or dying). Although world religions frame treating others with kindness and charity as a good in and of itself, an obvious by-product of such "selfless" efforts may be experiencing more caring relationships. Hence, the more people sanctify their interpersonal relationships, the more effort they may invest in those relationships and, in turn, those relationships may become more personally gratifying and satisfying (Mahoney, 2010). By contrast, investing nonrelational aspects of life with sacred significance may yield fewer personal benefits for two reasons. First, major world religions send mixed messages about the value of pursuing activities focused on personal achievement or gratification (Smith, 1958). For example, considerable variation exists across religious orienting systems about the sanctity of noninterpersonal strivings, such as achieving financial success or caring for the environment. Second, investing oneself in relatively abstract or impersonal sacred goals, such as the pursuit of artistic, intellectual, or technological achievements, may be less likely to provide the individual with interpersonal rewards, such as social support, which is one of the most robust factors tied to personal wellbeing (Smith & Christakis, 2008; Thoits, 2011). For these reasons, we examined the linkages of psychosocial outcomes with the sanctification of relationships and noninterpersonal domains separately.

### **Present Study**

The current study used meta-analytic techniques to summarize the strength of correlations between sanctification and psychosocial functioning across diverse aspects of life (e.g., human body, strivings, work, marriage, and parenting) examined in peer-reviewed journals and dissertations from 1999 to 2019. The wide range of domains that have been examined speak to the potential power of sanctification as an important perceptual psychospiritual process that cuts across many facets of life. The breadth of findings, however, can make it difficult to locate and appreciate quantitative linkages across various subdisciplines in the social sciences. Thus, our primary purpose was to synthesize the effects sizes of independent cases involving desirable and undesirable outcomes across multiple domains. Specifically, we expected that greater sanctification would be tied to greater positive psychosocial adjustment and less negative functioning, and we explored whether the former link

was stronger than the latter. We also explored whether the sanctification of close interpersonal relationships tended to yield stronger effects relative to the sanctification of other aspects of life.

### Method

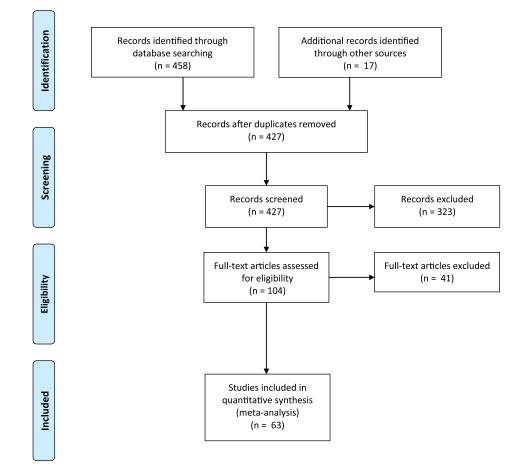
### **Identification of Articles for Review**

The search to locate the 63 studies used in this meta-analyses was conducted using the computer databases PsycINFO, ERIC, SocIN-DEX, Medline, and Psychology & Behavioral Sciences Collection, using a title and abstract search for the keywords "sanctification" or "sanctified" or "sacred moments" in the abstract of academic journals and dissertations on July 19, 2019 for 1999-2019 (n = 458). In addition, we used the reverse search function in Web of Science to locate 16 additional studies that had used or adapted the sanctification scales in Mahoney et al. (1999), plus one dissertation identified by an anonymous journal reviewer. To be included for full review, a study had to be written in English, report quantitative findings about psychosocial adjustment, assess sanctification based on a variant of theistic and nontheistic measures from Mahoney et al. (1999), and be published in peer-reviewed journals or as a dissertation. We excluded studies that only assessed religiousness or spiritual as criterion variables. After eliminating 48 duplicates documents, we reviewed titles and abstracts for relevance, and identified 104 full-text articles to assess for eligibility. After examining full manuscripts, we excluded 41 from analyses because they did not meet inclusionary criteria, or had missing information about bivariate associations, with no response from the corresponding authors after we contacted them to request bivariate associations. Figure 1 summarizes our search process.

### **Coding Policies**

A pair of coders (i.e., second and third author or first and second author) reviewed and recorded the following descriptive information about each of the 63 studies used in the current study (see Table 1). The coders identified whether a study focused on noninterpersonal facets of life or dyadic interpersonal relationships. They also sorted the noninterpersonal studies into the descriptive domains of the human body, dreaming, environment, learning, service, strivings, work, and Trump election, and the interpersonal studies into the domains of committed union, forgiveness, marriage, sex in marriage, sex in committed union, parenting or parent-child relationship, romantic relationship, sexuality of self, therapist-client relationship, and division of household tasks. The coders also identified the type of sample recruited, as well as the gender and religious affiliation of sample(s) if that characteristic was used to select participants. For studies where two reporters were used to study the quality of dyadic relationships (e.g., husbands and wives), we indicate the gender of participants in the two subsamples when possible.

For primary meta-analytic analyses, the coders identified each case or group of independent or separate respondents within a study who completed sanctification items and outcome measures. Coders identified all of the bivariate correlations reported between sanctification measures and each study's outcome variables for each case, regardless of whether the authors identified the associations as statistically significant or not. If the authors examined linkages between sanctification and psychosocial criteria but did not report Figure 1 Locating Sanctification Studies 1999–July 2019



Note. See the online article for the color version for this figure.

bivariate associations (e.g., reported coefficients in the context of models that controlled for other variables), then we contacted the authors to request the bivariate associations. In studies where two respondents (e.g., wives and husbands; parent and offspring) reported their own perceptions about the sanctification of an interpersonal relationship (e.g., marriage and parenting) and psychosocial characteristics of the dyadic relationship, each subsample was treated as a separate case. As seen in Table 1, one aggregate bivariate correlation was calculated across of all the positive outcomes assessed within a given study for its target case or group of participants. Likewise, one aggregate bivariate correlation was generated for each study for the negative outcomes reported for the target case. Hence, only one association from each case within a given study was used to generate weighted effect sizes for each type of psychosocial functioning across all studies; this was done to avoid having a disproportionate number of significant correlations from any given study skew results for links between sanctification and either positive or negative psychosocial adjustment. We also took this conservative approach to avoid the risk that a given study that used intercorrelated criterion measures/constructs would inflate the influence of the study and thereby inflate the overall effect size across studies. Thus, consistent with Hunter et al. (1982) and

Hedges and Olkin (1985), when multiple positive or negative psychosocial measures were used within a given study, statistically significant and nonsignificant associations were averaged into one overall effect size for each type of psychosocial functioning.

In studies where both the theistic and nontheistic sanctification measures were used, the coders aggregated the correlations from the two subscales. We did this because only 21 studies across divergent domains reported results separately for each subscale, and these two indices are typically moderately to highly correlated. More importantly, both indices could be expected to be correlated similarly with psychosocial outcomes based on the studies conducted thus far with predominately in U.S. samples (Pargament et al., 2017; Pargament & Mahoney, 2005). Notably, in 10 of the 19 studies where the two indices were combined into one total sanctification score, their correlation was, on average, r = .68 (SD = .16). This figure is higher than the 13 of the 21 studies that reported separate bivariate associations of theistic and nontheistic sanctification with psychosocial outcomes. In these 13 studies, the correlation between theistic and nontheistic sanctification was, on average, r = .57 (SD = .09). In another 14 studies, only theistic sanctification was assessed, and in 9 studies, only nontheistic sanctification was assessed. Overall, the authors appeared to make assumptions that separate or combined indices were especially relevant for the type of sample and/or domain. For the purposes of this meta-analysis, however, we had no strong theoretical or empirical reason to propose that the type of sanctification index would moderate the linkages, despite likely differences in the mean levels of each type of sanctification across various domains or subsamples.

We coded whether the criterion variables captured positive or negative psychosocial functioning. There were 10 variables across all 63 studies that we judged as unlikely to elicit a clear consensus in the field of psychology as reflecting positive or negative functioning (less than 4% of all criterion variables); these included: (a) Dividing household labor according to divine prescription (Chan et al., 2014); (b) parent rating of child's affective discomfort (Volling et al. (2009); (c) perceived obstacles to strivings (Mahoney, Carels, et al., 2005); (d) disapproval of alcohol consumption and (e) disapproval of illicit drug use (Mahoney, Carels, et al., 2005); (f) avoidance of forgiveness (Davis et al., 2012); (g) commitment to empiricism, (h) tutoring the imagination & (i) positive childhood recollections (Doehring et al., 2009), and (j) parental preference of the child (Lynn et al., 2016). The bivariate associations for these 10 variables were not included when we generated an aggregated, weighted effect size. Reliability between the two coders in extracting and labeling the individual bivariate correlations between measures of sanctification and psychosocial adjustment was 85% or higher; the coders consulted with each other to resolve coding discrepancies prior to creating aggregate r coefficients.

### **Data Analyses**

We used Metawin to convert r coefficients into standardized zr's, which were weighted by N (number of participants). To aid in the interpretability of the results, we converted the zr's back to r's to display the final results in Table 2. We use the term cases when referring to individual effect sizes (i.e., r's) from our studies and reserve the term effect size (i.e., zr's that were converted back to r's)

### Table 2

Summary Statistics for Sanctification and Outcomes

for standardized overall effect sizes. Table 1 includes four pairs of studies marked with the same superscript letter (a, b, c, or d); these pairs used the same or nearly the same respondents from the same data set across both studies. Thus, in our meta-analysis, the samples in these four pairs of studies were not treated as independent; instead, they were combined and treated as a single case for each reporter for the findings reported in Table 2. For example, the respondents used in Benjamins et al. (2011) and Ellison et al. (2008) were drawn from the same national survey, and thus they were treated as a single independent case (i.e., N = 1091.5, mean r = -.04) when generating summary statistics for Table 2, which is the average across both studies. The same procedure was followed for the other three pairs of studies that used the same respondents.

As can be seen in Table 2, across all 63 studies used in this metaanalysis, we identified 66 effects involving positive psychosocial outcomes and 43 involving negative psychosocial outcomes. For the 34 studies targeting an interpersonal relationship, we identified 41 positive and 23 negative effects. For the 26 studies that focused on a noninterpersonal facet of life, we identified 23 and 18 effects involving positive and negative psychosocial factors, respectively.

### Results

### **Descriptive Information**

Table 1 offers descriptive information about each of the 63 studies including the sanctified domain, general type of sample, each of the positive and negative psychosocial outcomes assessed, and the aggregated association across positive outcomes and/or negative outcomes for a given sample. Thirty-seven studies drew from community samples from the U.S. including those drawn from local, regional, or multistate geographical areas, 10 studies focused specifically on college students from U.S. institutions (3 of which were private Christian institutions), 9 studies used nationally representative samples of the targeted group of participants (e.g., adults,

Type of effect	Number of effect sizes	Cumulative effect size $(r)$ (95% CI)	Kendall's Tau	QT statistic	Fail-safe test
Overall sanctification and positive adjustment	66 ( $N = 19,240.17$ )	.22 (.17–.25)	02 ( $p = .79$ )	38.42 df = 65	2159.9
Overall sanctification and negative adjustment	43 ( $N = 14,174.67$ )	10 (1506)	05 ( <i>p</i> = .67)	(p = 1.00) 21.04 df = 42	322.0
Relational sanctification and positive adjustment	41 ( $N = 9,417$ )	.24 (.20–.29)	.06 ( $p = .58$ )	(p = 1.00) 32.27 df = 40	1451.2
Nonrelational sanctification and positive adjustment	23 ( $N = 6,778.17$ )	.16 (.11–.22)	06 ( <i>p</i> = .47)	(p = .80) 20.68 df = 22	313.6
Relational sanctification and negative adjustment	23 ( $N = 5,925.00$ )	12 (1806)	02 ( <i>p</i> = .85)	(p = .54) 11.79 df = 22	115.4
Nonrelational sanctification and negative adjustment	18 ( <i>N</i> = 5,204.67)	09 (1404)	07 ( $p = .70$ )	(p = .96) 14.81 df = 17 (p = .64)	77.2.5

*Note.* As seen in Table 1, four pairs of studies are marked with the same superscript letter (a, b, c, or d) because these pairs used the same or nearly the same respondents from the same data set across both studies. Thus, in our meta-analysis, the samples in these four pairs of studies were not treated as independent; instead, they were combined and treated as a single case for each reporter for the findings reported in Table 2 and this accounts for the fractions in the number of participants.

parents, and married couples), 7 studies used samples drawn from a Christian organization or involved community members affiliated with a Christian group, 4 studies involved non-U.S. samples, and 1 study combined female college students with those in treatment for eating disorders. Out of the 63 studies that reported at least one of the following demographic variables, the majority of participants in our analyses were female (58.7%), Caucasian (79.4%), and Christian (76.0%), with the mean age of participants being 39.9, ranging from  $M_{age} = 13.84-74.6$ .

The average alpha coefficient for the various sanctification measures was .93, ranging from .66 to .99. Therefore, we assume that the sanctification measures had satisfactory reliability across studies. Studies with lower reliability for sanctification used two items to assess sanctification (e.g., Ellison et al., 2011; Dumas & Nissley-Tsiopinis, 2006). Studies that used nationally representative samples typically used one or two items. All sanctification measures were continuous and used a Likert-type scale, ranging from 5 to 7 points.

### **Meta-Analyses Results**

### Sanctification and Positive Psychosocial Functioning

Greater sanctification was consistently tied to greater positive psychosocial adjustment. Specifically, a random-effects model across 66 cases (N = 19,240.17) yielded a weighted mean effect size *r* of .22 (95% CI = .17–.26). According to Cohen (1988), this was a small-to-medium effect size. Using Rosenthal's (1979) fail-safe test, there would need to be 2,159.9 nonsignificant findings to change our conclusion. Kendall's Tau was -.02, p = .79, suggesting no publication bias. The *Q*-test was also nonsignificant, Q = 38.42 (p = 1.00); this indicates that the variance among the effect sizes did not exceed what would be expected given sampling error.

### Sanctification and Negative Psychosocial Functioning

Greater sanctification was tied to less negative functioning as reflected by a weighted mean effect size r of -0.10 (95% CI = -.15 to -.06) in a random-effects model across 43 cases (N = 14,174.67). According to Cohen (1988), this was a small effect size. Using the fail-safe test, there would need to be 322.0 nonsignificant findings to change this conclusion. Kendall's Tau was -.05, p = .67, suggesting no publication bias. The *Q*-test was also nonsignificant, 21.04 (p = 1.00).

### Sanctification of Interpersonal Relationships

The weighted mean effect size between the sanctification of close interpersonal relationships across 41 cases (N = 9,417) with positive functioning was r = 0.25 (95% CI = .20–.30) and r = -.12 (95% CI = ...20–.30). According to Cohen (1988), the effect size for positive functioning was small-to-medium in size, and was small in size for negative functioning. Using the fail-safe method, there would need to be 1,451.2 and 115.4 nonsignificant findings, respectively, to change these two effect sizes. The Kendall's Tau was .06 (p = .58) and -.02 (p = .85), respectively, for these effects which suggests neither was vulnerable to publication bias. The *Q*-tests for positive (i.e., 32.27, p = .80) and negative (i.e., 11.79, p = .96) effects were also nonsignificant.

### Sanctification of Noninterpersonal Domains

The weighted mean effect size between the sanctification of noninterpersonal domains across 23 cases (N = 6,778.17) with positive functioning was r = 0.16 (95% CI = .11–.22) and r = -.08 (95% CI = -.13 to -.03) for negative functioning across 18 cases (N = 5,204.67). According to Cohen (1988), both of these effect sizes are small in magnitude. Using the fail-safe method, there would need to be 313.6 and 77.2 nonsignificant findings, respectively, to change these two effect sizes. The Kendall's Tau was -.06 (p = .47) and -.07 (p = .70), respectively, for these effects which suggests neither was vulnerable to publication bias. The *Q*-tests for positive (i.e., 20.68, p = .54) and negative (i.e., 14.81, p = .61) effects were also nonsignificant.

### Discussion

The results of this meta-analysis indicate that the sanctification construct offers the field of the psychology of religion and spiritually one promising psychospiritual construct that is applicable to the pursuit, preservation, and protection of a wide range of life endeavors and experiences. Across diverse facets of life, greater sanctification was consistently tied to greater positive psychosocial adjustment, with a small-to-medium size of the effect (i.e., r = .22) across cases. Greater sanctification was also related to less maladaptive adjustment within a given domain of life, with a small effect size (i.e., r = -.10). When looking at the sanctification of close human relationships, the association with positive psychosocial functioning emerged as the strongest effect (i.e., r = .24) compared to negative adjustment (i.e., r = -.12) as well as to the links of sanctification of noninterpersonal domains with positive (i.e., r = .16) or negative (i.e., r = -.09) functioning. Based on QT statistics, the data did not evidence substantial heterogeneity. This indicates that effect sizes did not diverge markedly across samples. As a reminder, however, we averaged the correlations of positive and negative outcomes within each set of independent cases; thus, our analyses could not detect the extent of variability within each type of outcome. According to Kendall's Tau statistics, our findings do not appear to be vulnerable to publication bias. Similarly, the fail-safe statistics indicate that well over 1,000 nonsignificant findings would be needed to change our conclusions regarding positive outcomes tied to the sanctification across all domains and sanctification of interpersonal relationships, with approximately 55-313 studies needed to nullify the other effects.

The consistent linkages we found between sanctification and better psychosocial adjustment across multiple domains of life are in accord with theory suggesting that people may invest more efforts into and derive more psychosocial benefits from sanctified dimensions of their lives (Pargament & Mahoney, 2005; Pargament et al., 2017). Our findings also suggest that many seemingly secular aspects of life can be an important source of spiritual value and meaning. In that sense, the construct of sanctification broadens the psychological inquiry about ways religion and spirituality can function as a resource to domains that have been relatively unexplored, such as work, one's body, the environment, marriage and romantic unions, and family life (Mahoney et al., 2013). On the practical side, the studies point to the value in exploring and perhaps encouraging the capacity to see a deeper spiritual dimension to what may seem to be ordinary dimensions of life (Pargament et al., 2017). Such capacities may represent a distinctive wellspring of inspiration and resilience for many people as they navigate normative developmental tasks across the lifespan. This includes creating and maintaining commitments to close relationships and family bonds, educational endeavors, work and careers, religious or civic institutions, and personal health and well-being.

In line with the significance that world religions place on close interpersonal bonds, our findings also highlight that sanctification clearly correlates with better relational functioning; the findings were less robust for noninterpersonal domains. The array of relationships that sanctification applies to include heterosexual marriages as well as same-sex partnerships, sexual unions, and parent-child relationships in families headed by married and single parents. Thus, the more people sanctify their relationships, the more they may invest effort in and derive benefits from forming and maintaining ties with loved ones, even if those bonds extend beyond heterosexual marriage (Mahoney, 2010). Furthermore, although most studies on sanctification involve cross-sectional data, an experimental study found greater sanctity of a romantic relationship predicted less infidelity (Fincham et al., 2010), and two studies using longitudinal data have found that greater sanctification of marriage predicted more positive communication between spouses during observed interactions (Kusner et al., 2014; Padgett et al., 2019). We look forward to additional research that uses longitudinal designs to replicate and extend knowledge about the potential predictive power of sanctification across multiple domains.

Notably, the theistic and nontheistic sanctification measures were designed to allow for that possibility that researchers could investigate aspects of life that some people might view as sacred whereas others might view as a sacred violation or loss. Example include cohabiting or nonmarital sexual unions, divorce, unpopular political agendas or leaders, and war. An array of potentially fruitful, but less controversial, domains also await investigation such as the sanctity of volunteer or scientific work, friendship, and various roles in helping professions (e.g., education and medicine). In pursuing such research, we support researchers adapting the sanctification subscales to map onto particular domains of life. At the same time, we recommend using multiitems subscales for optimal internal consistency and keeping the items, especially the theistic items, sufficiently broad to apply to diverse worldviews about deities. In addition, more work needs to be conducted on non-Western samples with careful attention paid to adapting theistic and nontheistic sanctification items as needed. Studies are also needed to identify factors that predict sanctification (e.g., Doehring et al., 2009). Where does "sanctification" come from? What are the developmental, cultural, and individual difference factors facilitate peoples' sacred perceptions? Finally, efforts to translate basic findings into more applied work would benefit from more research on the potential downside of sanctification, such as setting people up for more distress when a sacred aspect of life is threatened, violated, or harmed (e.g., Hawley et al., 2015; Mahoney, 2010; Pargament et al., 2005). Such work would enhance the sensitivity needed to implement psychospiritual education programs designed to facilitate the spiritual processes of viewing various aspects of life as sacred.

Moving forward, we hope researchers delve into whether the two types of sanctification yield similar or distinctive results across subsamples and explore other moderators that may impact the size of the association between sanctification and psychosocial outcomes. In addition, the strength of associations between sanctification and psychosocial adjustment may vary based on the type of (non)religious subgroup or cultural context (e.g., predominantly monotheistic or not), demographic characteristics (e.g., age, gender, and education), and outcome measure used. For example, the nontheistic items may or may not be relatively more potent for the increasing number of younger Americans who reject involvement in organized religious groups but still report belief in God/Universal spirit. Sanctification may function as a single latent construct in some contexts, whereas this may not be the case for other samples or domains. Researchers, however, also need to avoid making premature assumptions that sanctification is irrelevant in subgroups that are likely to report lower mean levels of sanctification than other subgroups without testing this premise. For example, although sexual minorities may less often endorse theistic or nontheistic sanctification of their sexual relationship with their spouses or partners compared to heterosexuals, the strength of these correlations with relational outcomes may be similar for both groups. By analogy, although women tend to attend religious services more often than men, both men and women may report similarly helpful (or harmful) outcomes for low, moderate, and high levels of attendance, depending on the topic under investigation. Qualitative studies could also help elucidate for whom sanctification is relevant. For example, Deal & O'Grady, 2020 found links between the nontheistic sanctification of nature and psychosocial functioning for nontheist environmental justice activists despite these same participants endorsing a neutral score on the sacred adjectives scale (Deal & Magyar-Russell, 2018). Finally, researchers need to report the correlation between theistic and nontheistic scales if both are used, and offer a clear rationale for their choices in selecting the subscale(s) used.

In summary, the scientific study of sanctification represents an exciting and potentially fruitful line of basic research that we hope will continue to grow rapidly in the future. The consistent findings from 63 studies across diverse sociological and psychological subspecialty areas robustly support the following take-away conclusion-viewing life through a sacred lens represents a promising phenomenon of interest for the field, one that expands research on religion and spirituality beyond abstract beliefs about the heavenly phenomenon to ways that people infuse earthly life with divine significance and meaning. The findings from this growing body of research demonstrate that the process of sanctification holds significant implications for both positive (Hawley et al., 2015) and negative psychosocial adjustment. As significantly, these findings call for further attention to (a) the long-term implications of sanctification for relational well-being and personal health; (b) the factors that may mediate and moderate the linkages between sanctification and psychosocial adjustment; and (c) the practical value of fostering the capacity to see life through a sacred lens among people facing challenges in their daily lives and/or clinical levels of distress in their relationships or psychological functioning.

### References

<sup>\*</sup>References marked with an asterisk indicate studies included in the metaanalysis

<sup>\*</sup>Alvarado, C. (2016). Sacred moments in nursing care from the perspective of frontline psychiatric health providers: Prevalence and consequences (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global database. (UMI No. 10252077)

- \*An, H. A., West, A. D., Sandage, S. J., & Bell, C. A. (2019). Relational spirituality, mature alterity, and spiritual service among ministry leaders: An empirical study. *Pastoral Psychology*, 68(2), 127–143. https://doi.org/ 10.1007/s11089-018-0846-9
- \*Backus, L. (2015). Sanctification of work: A potential moderator of the relationship between work stress and health (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global database. (UMI No. 3671255)
- \*Benjamins, M. R., Ellison, C. G., Krause, N. M., & Marcum, J. P. (2011). Religion and preventive service use: Do congregational support and religious beliefs explain the relationship between attendance and utilization? *Journal of Behavioral Medicine*, 34(6), 462–476. https://doi.org/10 .1007/s10865-011-9318-8
- \*Brelsford, G. M., & Righi, S. E. (2015). Grateful and sanctified: Exploring the parent-child context. *Journal of Family Issues*, 36(12), 1575–1594. https://doi.org/10.1177/0192513X13513019
- \*Chan, C. S., Hall, M. E. L., & Anderson, T. L. (2014). Gender differences in predictors anticipated divisions of household labor in Christian students. *Journal of Psychology and Christianity*, 33(1), 36–44.
- \*Cheyne, R. A. (2005). The sanctification of parenting and adoption among special needs adoptive parents (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global database. (UMI No. 3159596)
- \*Claney, C. (2018). Sexual without sex: Holistic sexual health and wellbeing for single emerging adult Christian women (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global database. (UMI No. 10624334)
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum.
- \*Davis, D. E., Hook, J. N., Van Tongeren, D. R., & Worthington, E. L. (2012). Sanctification of forgiveness. *Psychology of Religion and Spirituality*, 4(1), 31–39. https://doi.org/10.1037/a0025803
- \*Davis, J. M., Horrell, K. E., Anderson, T. L., & Lewis Hall, M. E. (2018). Religious and role contributions to the marital satisfaction of Evangelical women. *Journal of Psychology and Theology*, 46(3), 184–198. https:// doi.org/10.1177/0091647118794244
- Deal, P. J., & Magyar-Russell, G. (2018). Sanctification theory: Is nontheistic sanctification nontheistic enough? *Psychology of Religion and Spirituality*, 10(3), 244–253. https://doi.org/10.1037/rel0000204
- Deal, P. J., & O'Grady, K. A. (2020). Environmental justice activism: A transformative, contemporary nature religion. *Review of Religious Research*, 62(2), 315–332. https://doi.org/10.1007/s13644-020-00409-y
- Delaney, H. D., Miller, W. R., & Bisonó, A. M. (2007). Religiosity and spirituality among psychologists: A survey of clinician members of the American Psychological Association. *Professional Psychology: Research and Practice*, 38(5), 538–546. https://doi.org/10.1037/0735-7028.38.5.538
- \*Doehring, C., Clarke, A., Pargament, K. I., Hayes, A., Hammer, D., Nickolas, M., & Hughes, P. (2009). Perceiving sacredness in life: Correlates and predictors. *Archiv für Religionspsychologie*, *31*, 55–73. https:// doi.org/10.1163/157361209X371492
- \*Dumas, J. E., & Nissley-Tsiopinis, J. (2006). Parental global religiousness, sanctification of parenting, and positive and negative religious coping as predictors of parental and child functioning. *International Journal for the Psychology of Religion*, 16(4), 289–310. https://doi.org/10.1207/ s15327582ijpr1604\_4
- \*Ellison, C. G., Henderson, A. K., Glenn, N. D., & Harkrider, K. E. (2011). Sanctification, stress, and marital quality. *Family Relations: An Interdisciplinary Journal of Applied Family Studies*, 60(4), 404–420. https://doi.org/10.1111/j.1741-3729.2011.00658.x
- \*Ellison, C. G., Lee, J., Benjamins, M. R., Krause, N. M., Ryan, D. N., & Marcum, J. P. (2008). Congregational support networks, health beliefs, and annual medical exams: Findings from a nationwide sample of Presbyterians. *Review of Religious Research*, 50(2), 176–193. http:// www.jstor.org/stable/20447560

- \*Emmons, R. A., & Kneezel, T. T. (2005). Giving thanks: Spiritual and religious correlates of gratitude. *Journal of Psychology and Christianity*, 24(2), 140–148.
- \*Fincham, F. D., Lambert, N. M., & Beach, S. R. H. (2010). Faith and unfaithfulness: Can praying for your partner reduce infidelity? *Journal of Personality and Social Psychology*, 99(4), 649–659. https://doi.org/10 .1037/a0019628
- \*France, S. J. (2006). Spirituality and the embodied self: An exploration of the relationships between spirituality, sense of self, embodiment, and subjective well-being (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global database. (UMI No. 3240837)
- \*Grossoehme, D. H., Opipari-Arrigan, L., VanDyke, R., Thurmond, S., & Seid, M. (2012). Relationship of adherence determinants and parental spirituality in cystic fibrosis. *Pediatric Pulmonology*, 47(6), 558–566. https://doi.org/10.1002/ppul.21614
- \*Grossoehme, D. H., Szczesniak, R. D., Britton, L. L., Siracusa, C. M., Quittner, A. L., Chini, B. A., Dimitriou, S. M., & Seid, M. (2015). Adherence determinants in cystic fibrosis: Cluster analysis of parental psychosocial, religious, and/or spiritual factors. *Annals of the American Thoracic Society*, *12*(6), 838–846. https://doi.org/10.1513/AnnalsATS .201408-379OC
- \*Hall, M. E. L., Oates, K. L. M., Anderson, T. L., & Willingham, M. M. (2012). Calling and conflict: The sanctification of work in working mothers. *Psychology of Religion and Spirituality*, 4(1), 71–83. https:// doi.org/10.1037/a0023191
- Hawley, A. R., Mahoney, A., Pargament, K. I., & Gordon, A. K. (2015). Sexuality and spirituality as predictors of distress over a romantic breakup: Mediated and moderated pathways. *Spirituality in Clinical Practice*, 2(2), 145–159. https://doi.org/10.1037/scp0000034
- Hedges, L., & Olkin, I. (1985). *Statistical methods for meta-analysis*. Academic Press.
- \*Henderson, A. K., Ellison, C. G., & Glenn, N. D. (2018). Religion and Relationship Quality Among Cohabiting and Dating Couples. *Journal of Family Issues*, 39(7), 1904–1932. https://doi.org/10.1177/0192513X17728982
- \*Hernandez, K. M. (2012). Using spiritual resources to prevent declines in sexuality among first-time parents (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global database. (UMI No. 3464177)
- \*Hernandez, K. M., Mahoney, A., & Pargament, K. I. (2011). Sanctification of sexuality: Implications for newlyweds' marital and sexual quality. *Journal of Family Psychology*, 25(5), 775–780. https://doi.org/10.1037/ a0025103
- \*Hernandez-Kane, K. M., & Mahoney, A. (2018). Sex through a sacred lens: Longitudinal effects of sanctification of marital sexuality. *Journal of Family Psychology*, 32(4), 425–434. https://doi.org/10.1037/fam0000392
- \*Homan, K. J., & Boyatzis, C. J. (2009). Body image in older adults: Links with religion and gender. *Journal of Adult Development*, 16(4), 230–238. https://doi.org/10.1007/s10804-009-9069-8
- \*Homan, K. J., & Boyatzis, C. J. (2010). Religiosity, sense of meaning, and health behavior in older adults. *International Journal for the Psychology* of *Religion*, 20(3), 173–186. https://doi.org/10.1080/10508619.2010 .481225
- Hood, R. W., Hill, P. C., & Spilka, B. (2018). The psychology of religion: An empirical approach (5th ed.). Guilford Press.
- Hunter, J. E., Schmidt, F. L., & Jackson, G. B. (1982). *Meta-Analysis: Cumulating research findings across studies*. Sage Publications.
- \*Jacobson, H. L., Hall, M. E. L., & Anderson, T. L. (2013). Theology and the body: Sanctification and bodily experiences. *Psychology of Religion and Spirituality*, 5(1), 41–50. https://doi.org/10.1037/a0028042
- \*Jacobson, H. L., Hall, M. E. L., Anderson, T. L., & Willingham, M. M. (2016a). Religious beliefs and experiences of the body: An extension of the developmental theory of embodiment. *Mental Health, Religion & Culture*, 19(1), 52–67. https://doi.org/10.1080/13674676.2015.1115473
- \*Jacobson, H. L., Hall, M. E. L., Anderson, T. L., & Willingham, M. M. (2016b). Temple or prison: Religious beliefs and attitudes toward the

body. Journal of Religion and Health, 55(6), 2154–2173. https://doi.org/ 10.1007/s10943-016-0266-z

- \*Jang, J. C. (2018). The relationship between intentional father involvement and intergenerational transmission of Christian faith among evangelical Presbyterian families in South Korea (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global database. (UMI No. 10839358)
- \*Kopp, A. T., Chini, B. A., Dimitriou, S. M., & Grossoehme, D. H. (2017). Body sanctification and sleep in adolescents with cystic fibrosis: A pilot study. *Journal of Religion and Health*, 56(5), 1837–1845. https://doi.org/ 10.1007/s10943-017-0415-z
- \*Krause, N., Pargament, K., Hill, P., & Ironson, G. (2016). Sanctification of life and health: Insights from the landmark spirituality and health survey. *Mental Health, Religion & Culture*, 19(7), 660–673. https://doi.org/10 .1080/13674676.2016.1224823
- \*Kusner, K. G., Mahoney, A., Pargament, K. I., & DeMaris, A. (2014). Sanctification of marriage and spiritual intimacy predicting observed marital interactions across the transition to parenthood. *Journal of Family Psychology*, 28(5), 604–614. https://doi.org/10.1037/a0036989
- \*Lenihan, K. (2014). Religious constructs, commitment, and relationship satisfaction of Christian partners in same-sex couples (Doctoral dissertation). Available from ProQuest Dissertation & Theses Global database. (UMI No. 3560996)
- \*Leonhardt, N. D., Busby, D. M., & Willoughby, B. J. (2020). Sex guilt or sanctification? The indirect role of religiosity on sexual satisfaction. *Psychology of Religion and Spirituality*. 12(2), 213–222. https:// doi.org/10.1037/rel0000245
- \*Lucero, S. M. (2015). Job insecurity and religious/spiritual coping: Sacred resources for employment uncertainty (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global database. (UMI No. 3671454)
- \*Lynn, M. G., Grych, J. H., & Fosco, G. M. (2016). Influences on father involvement: Testing for unique contributions of religion. *Journal of Child* and Family Studies, 25(11), 3247–3259. https://doi.org/10.1007/s10826-016-0486-6
- \*Lynn, Q. K. (2009). Sacred sport: A study of student athletes' sanctification of sport (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global database. (UMI No. 3336349).
- Mahoney, A. (2010). Religion in families 1999-2009: A relational spirituality framework. *Journal of Marriage and Family*, 72(4), 805–827. https:// doi.org/10.1111/j.1741-3737.2010.00732.x
- \*Mahoney, A., Carels, R. A., Pargament, K. I., Wachholtz, A., Leeper, L. E., Kaplar, M., & Frutchey, R. (2005). The sanctification of the body and behavioral health patterns of college students. *International Journal for the Psychology of Religion*, 15(3), 221–238. https://doi.org/10.1207/ s15327582ijpr1503\_3
- \*Mahoney, A., Pargament, K. I., Cole, B., Jewell, T., Magyar, G. M., Tarakeshwar, N., & Phillips, R. (2005). A higher purpose: The sanctification of strivings in a community sample. *International Journal for the Psychology of Religion*, 15(3), 239–262. https://doi.org/10.1207/ s15327582ijpr1503\_4
- Mahoney, A., Pargament, K. I., & DeMaris, A. (2009). Couples viewing marriage and pregnancy through the lens of the sacred: A descriptive study. *Research in the Social Scientific Study of Religion*, 20, 1–45. https:// doi.org/10.1163/ej.9789004175624.i-334.7
- Mahoney, A., Pargament, K. I., & Hernandez, K. M. (2013). Heaven on earth: Beneficial effects of sanctification for individual and interpersonal well-being. J. Henry (Ed.), *The Oxford book of happiness*, (pp. 397–410). Oxford University Press.
- \*Mahoney, A., Pargament, K. I., Jewell, T., Swank, A. B., Scott, E., Emery, E., & Rye, M. (1999). Marriage and the spiritual realm: The role of proximal and distal religious constructs in marital functioning. *Journal of Family Psychology*, *13*(3), 321–338. https://doi.org/10.1037/0893-3200 .13.3.321

- \*Murray-Swank, N. A., Mahoney, A., & Pargament, K. I. (2006). Sanctification of parenting: Links to corporal punishment and parental warmth among biblically conservative and liberal mothers. *International Journal for the Psychology of Religion*, *16*(4), 271–287. https://doi.org/10.1207/ s15327582ijpr1604\_3
- \*Nelson, J. J., & Uecker, J. E. (2018). Are religious parents more satisfied parents? Individual- and couple-level religious correlates of parenting satisfaction. *Journal of Family Issues*, 39(7), 1770–1796. https://doi.org/ 10.1177/0192513X17728983
- Onedera, J. D. (Ed.). (2008). *The family therapy and counseling series. The role of religion in marriage and family counseling.* Routledge/Taylor & Francis Group.
- Padgett, E., Annette Mahoney, A., Pargament, K. I., & DeMaris, A. (2019). Marital sanctification and spiritual intimacy predicting married couples' observed intimacy skills across the transition to parenthood. *Religions*, 10, 177–193. https://doi.org/10.3390/rel10030177
- Paloutzian, R. F., & Park, C. L. (Eds.). (2013). Handbook of the psychology of religion and spirituality (2nd ed.). The Guilford Press.
- Pargament, K. I., Exline, J. J., & Jones, J. W. (Eds.). (2013). APA handbook of psychology, religion, and spirituality: Vol. 1. Context, theory, and research. American Psychological Association. https://doi.org/10.1037/ 14045-000
- \*Pargament, K. I., Lomax, J. W., McGee, J. S., & Fang, Q. (2014). Sacred moments in psychotherapy from the perspectives of mental health providers and clients: Prevalence, predictors, and consequences. *Spirituality in Clinical Practice*, 1(4), 248–262. https://doi.org/10.1037/scp0000043
- Pargament, K. I., Magyar, G. M., Benore, E., & Mahoney, A. (2005). Sacrilege: A study of sacred loss and desecration and their implications for health and well-being in a community sample. *Journal for the Scientific Study of Religion*, 44(1), 59–78. https://doi.org/10.1111/j.1468-5906.2005.00265.x
- Pargament, K. I., & Mahoney, A. (2005). Sacred matters: Sanctification as vital topic for the psychology of religion. *International Journal for the Psychology* of *Religion*, 15(3), 179–198. https://doi.org/10.1207/s15327582ijpr1503\_1
- Pargament, K. I., Mahoney, A., & Shafranske, E. P. (Eds.). (2013). APA handbook of psychology, religion, and spirituality: Vol. 2. An applied psychology of religion and spirituality. American Psychological Association. https://doi.org/10.1037/14046-000
- Pargament, K. I., Oman, D., Pomerleau, J., & Mahoney, A. (2017). Some contributions of a psychological approach to the study of the sacred. *Religion*, 47(4), 718–744. https://doi.org/10.1080/0048721X.2017.1333205
- \*Pearce, E. D. (2019). The role of transformative processes in marital satisfaction among Christians (Doctoral dissertation). Available from ProOuest Dissertations & Theses Global database. (UMI No. 0987111)
- \*Phillips, R. E., III, Avant, S., Kalp, D., Cenkner, D., Lucci, M., Herndon, R., & Maccarelli, A. (2017). Initial validation of measures of sanctification in same-sex romantic relationships and sexual behavior. *Journal for the Scientific Study of Religion*, 56(4), 836–851. https://doi.org/10.1111/ jssr.12488
- \*Phillips, R. E., & Kitchens, M. B. (2016). Augustine or philistine? College students' sanctification of learning and its implication. *International Journal for the Psychology of Religion*, 26(1), 80–94. https://doi.org/10 .1080/10508619.2014.999492
- \*Phillips, R. E., & Pargament, K. I. (2002). The sanctification of dreams: Prevalence and implications. *Dreaming*, 12(3), 141–153. https://doi.org/ 10.1023/A:1020166208750
- \*Piekarek, D. E. (2009). An empirical test of the sanctification and social support hypotheses of religious influences on parenting (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global database. (UMI No. 3326746)
- \*Pizzigoni, D. M. (2017). The role of spirituality in the internalization of objectification and eating disorder symptomatology in women (Publication No. AAI3326746) [Doctoral dissertation] (1962–2010). Proquest Digital Dissertations. https://epublications.marquette.edu/dissertations/ AAI3326746

- \*Rauer, A., & Volling, B. (2015). The role of relational spirituality in happily-married couples' observed problem-solving. *Psychology of Religion and Spirituality*, 7(3), 239–249. https://doi.org/10.1037/rel0000022
- \*Reich, N., & Kalantar, S. M. (2018). The role of praying for the spouse and sanctification of marriage in reducing infidelity. *Mental Health, Religion & Culture*, 21(1), 65–76. https://doi.org/10.1080/13674676.2018.1447555
- Rosenthal, R. (1979). The "file drawer problem" and tolerance for null results. *Psychological Bulletin*, 86, 638–641. https://doi.org/10.1037/ 0033-2909.86.3.638
- \*Rusu, P. P., Hilpert, P., Beach, S. R. H., Turliuc, M. N., & Bodenmann, G. (2015). Dyadic coping mediates the association of sanctification with marital satisfaction and well-being. *Journal of Family Psychology*, 29(6), 843–849. https://doi.org/10.1037/fam0000108
- \*Sabey, A. K., Rauer, A. J., & Jensen, J. F. (2014). Compassionate love as a mechanism linking sacred qualities of marriage to older couples' marital satisfaction. *Journal of Family Psychology*, 28(5), 594–603. https:// doi.org/10.1037/a0036991
- Schnitker, S. A., & Emmons, R. A. (2013). Spiritual striving and seeking the sacred: Religion as meaningful goal-directed behavior. *International Journal for the Psychology of Religion*, 23(4), 315–324. https://doi.org/ 10.1080/10508619.2013.795822
- Smith, H. (1958). The religions of man. Harper & Row.
- Smith, K. P., & Christakis, N. A. (2008). Social networks and health. Annual Review of Sociology, 34, 405–429. https://doi.org/10.1146/annurev.soc.34 .040507.134601
- \*Stafford, L., David, P., & McPherson, S. (2014). Sanctity of marriage and marital quality. *Journal of Social and Personal Relationships*, 31(1), 54– 70. https://doi.org/10.1177/0265407513486975
- \*Staples, M. A. (2009). A theological and marital interactional analysis of African American Christian couples (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global database. (UMI No. 3332492)
- \*Tarakeshwar, N., Swank, A. B., Pargament, K. I., & Mahoney, A. (2001). The sanctification of nature and theological conservatism: A study of

opposing religious correlates of environmentalism. *Review of Religious Research*, 42(4), 387–404. https://doi.org/10.2307/3512131

- Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal of Health and Social Behavior*, 52(2), 145– 161. https://doi.org/10.1177/0022146510395592
- \*Tix, A. P., & Frazier, P. A. (2005). Mediation and moderation of the relationship between intrinsic religiousness and mental health. *Personality* and Social Psychology Bulletin, 31(3), 295–306. https://doi.org/10.1177/ 0146167204271592
- \*Volling, B. L., Mahoney, A., & Rauer, A. J. (2009). Sanctification of parenting, moral socialization, and young children's conscience development. *Psychology of Religion and Spirituality*, 1(1), 53–68. https://doi.org/ 10.1037/a0014958
- \*Walker, A. G., Jones, M. N., Wuensch, K. L., Aziz, S., & Cope, J. G. (2008). Sanctifying work: Effects on satisfaction, commitment, and intent to leave. *International Journal for the Psychology of Religion*, 18(2), 132– 145. https://doi.org/10.1080/10508610701879480
- \*Walker, A. G., Smither, J. W., & DeBode, J. (2012). The effects of religiosity on ethical judgments. *Journal of Business Ethics*, 106(4), 437–452. https://doi.org/10.1007/s10551-011-1009-4
- \*Weyand, C., O'Laughlin, L., & Bennett, P. (2013). Dimensions of religiousness that influence parenting. *Psychology of Religion and Spirituality*, 5(3), 182–191. https://doi.org/10.1037/a0030627
- \*Wong, S., Waite, T., Wasson, R. S., Artschwager, A., Pargament, K. I., & O'Brien, W. H. (2019). The hand of God or the work of the devil? Spiritual appraisals and psychological adjustment after the 2016 U.S. presidential election. *Analyses of Social Issues and Public Policy (ASAP)*, 19(1), 224– 245. https://doi.org/10.1111/asap.12184

Received April 29, 2020 Revision received February 16, 2021

Accepted February 18, 2021