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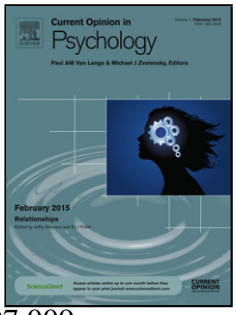

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Highlights

- Religiosity predicts endorsement of a meta-ethics based on deontic rules, rather than utilitarian consequentialism.
- Religion causes people to view morality as a se of objective truths
- Religiosity predicts higher self-reports of prosocial behavior, however lab-based behavioral measures detect no effect
- This self-report/behavioral task discrepancy can be explained by (a) a tendency for religiosity to be associated with a more self-enhancing personality, and (b) the failure to appreciate the situational nature of religiously-inspired prosocial behavior

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Does religion increase moral behavior?

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Abstract

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Despite his own disbelief, Critias—Plato's uncle and one of the earliest recorded atheists—argued that religion was necessary due to its salutary and stabilizing effect on the morality of the populace [1]. Variants of this argument have been echoed over the ensuring 25 centuries by both believers (e.g. Voltaire [2]) and non-believers (e.g. Marx [3]). Hitchens [4], a more recent atheist, has joined a chorus forcefully rejecting this line of thinking, claiming instead that there is conclusive evidence to the contrary; religion makes people mean and selfish. None of these assertions was backed by systematic evidence. However, accelerated social scientific research over the last ten years has now produced enough data to hazard a valid answer. Does religion increase moral behavior? Before answering, how religion intersects with moral decision-making—determining what is right in the first place—must first be discussed.

What is moral? Religious and non-religious people differ on meta-ethics

Religious commitments determine moral commitments. The very bases on which an individual decides what is right varies systematically depending on his or her religious beliefs [5].

Deontological and Objectivist

Religiosity is associated with a more deontic and objectivist meta-ethical style. Rules—often derived from divine command—are held to be inviolate

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prescriptions for what is right. For example, Piazza and Sousa [6] have shown that when confronted with questions about whether violating a moral rule (e.g. lying, stealing, etc.) is morally justified were it to lead to less suffering and greater happiness, people's responses are largely determined by their religiosity. The more religious people are, the less comfortable they are with ignoring abstract moral rules and basing their decisions on a utilitarian calculus of benefits and harms.

The more religious are also more apt to adopt an objectivist moral stance—that is, believing that if two people disagree on a moral issue, (at least) one must be wrong [7]. The non-religious are more likely to see moral decisions as subjective or culturally relative. In fact, religious priming studies—which aim to make causal claims about religion's impact by experimentally manipulating the salience of religion—have found that exposing people to implicit religious primes increases their tendency to see morality as objective [8].

Moral Foundations

Haidt & Graham's [9] Moral Foundations Theory fractionates moral concern into five (or sometimes six) more basic foundations. Endorsement of two of these foundations—concern over fairness and justice, and concern over harm and compassion—shows no difference across the spectrum of religiosity. However, endorsement of the other three foundations—concern over loyalty to the ingroup, over respect and obedience to authority, and over sanctity and purity—is higher among the more religious (Figure 1).

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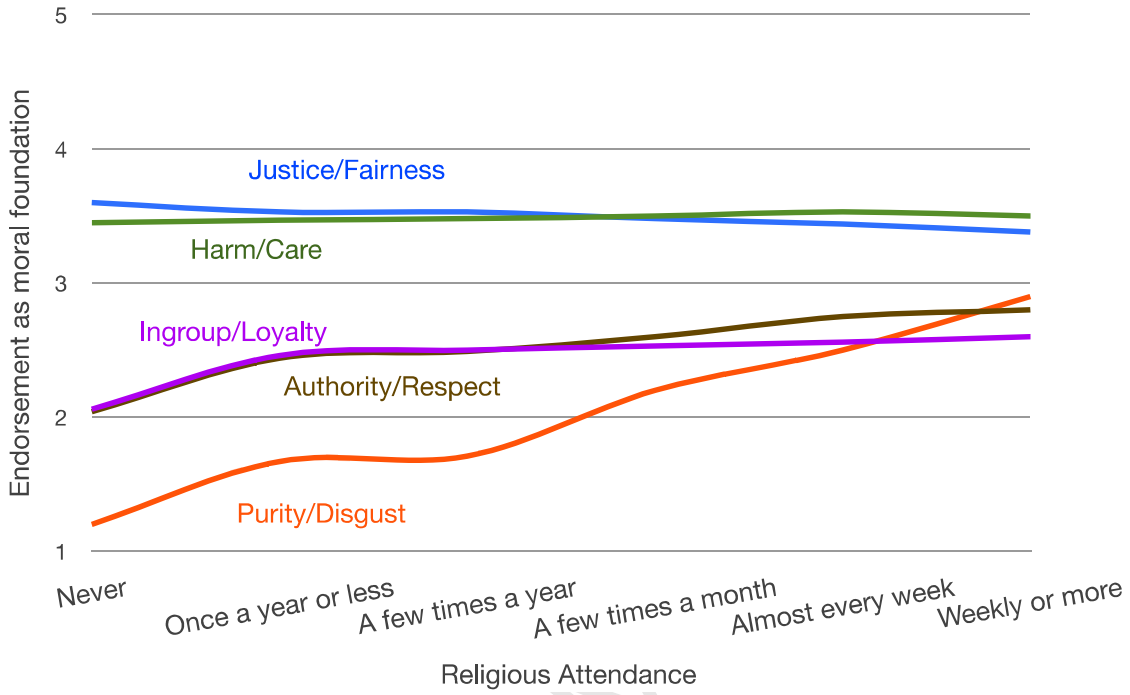

Figure 1: Religious attendance and endorsement of the five moral foundations. Religiosity predicts the three 'binding' foundations, but not Harm/Care and Justice/Fairness.

That religion may play a causal role in the increased concern for the latter three foundations sees some support from the religious priming literature. For example, not only does religiosity predict more parochial, ingroupish attitudes when it comes to racism [10], but priming Christians with God concepts has been shown to increase derogation of a range of ethnic, national, and religious outgroups, while increasing favor for the religious ingroup [11-13]. Religious priming has also been found to increase submission-related thoughts, obedience to authority figures, and

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conformity to group influence [14, 15]. No religious priming study has yet shown an effect on measures of disgust, purity and sanctity, but given the tight theoretical ties between these concepts and religion, future research may hold promise.

Prosociality

Despite these fundamental differences in the very types of morality that are endorsed, there is common ground on which believers and non-believers agree [16]. Where moral values do not conflict with each other, but instead conflict only with selfishness, we find the constellation of constructs that can be called 'prosocial' behavior: generosity, cooperation and honesty, for example. Note that prosociality is not confined to 'nice' behaviors, and can involve many aggressive and punitive behaviors that are nonetheless immediately costly to the self, and beneficial for others (see McKay & Whitehouse [5] for a similar discussion). Prosocial behavior offers a set of commonly endorsed constructs on which the religious and non-religious can be legitimately compared.

Religious people report more prosocial behavior than do the non-religious

Myriad surveys of charity, volunteerism, and helping behavior have consistently found reports of these behaviors to be positively associated with religiosity. For example, analyzing data from the *Giving and Volunteering in the United States survey*, and *Arts and Religion Survey*, Brooks [17] found that, of those who pray everyday, 83% give to charity, whereas the figure is 53% for those who never pray. This reported charity gap widens from 30 to 50 points when comparing

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those who attended a house of worship once a week, versus those who never attend. Even when only counting donations to non-religious charities, the charity gap is still 14 points, favoring the religious.

Decades of research by psychologists and economists have, however, failed to replicate these differences using behavioral tasks in the lab. Absent religious priming (see below), religiosity rarely predicts outcomes on economic games and other tasks designed to measure charitability, helping behavior, and other forms of prosociality. This discrepancy between self-report and behavioral measures of prosociality has been supported by a recent meta-analysis [18]. Across 31 studies (n=30,826), religiosity consistently predicted higher scores on self-report measures of prosociality, but no effect emerged for behavioral tasks.

What accounts for this discrepancy? There are two possibilities. First, the self-reports of the religious may overstate their actual prosocial behavior and instead reflect differences in socially desirable responding. Second, the behavioral tasks in a laboratory might not be representative of prosocial behaviors in which believers engage in the real world, and therefore understate real differences. These possibilities are not mutually incompatible, and both are supported by extensive bodies of research.

Meta-analyses reveal that religiosity is positively related to socially desirable responding, especially impression management [19, 20]. How religion relates to the desire to appear, but not necessarily be, prosocial is elegantly captured by a study Batson and colleagues [21]. Participants were given the opportunity to publicly

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volunteer to help a child in need. In one condition, the subject was likely to be selected to follow through on his or her offer. In a second condition, however, this possibility was remote, meaning one could reap the benefits of appearing altruistic while knowing that one would be unlikely to actually pay the costs of engaging in any altruism. Though intrinsic religiosity was unrelated to offers to help in the former condition, it strongly correlated (r=0.50) in the latter. That is, the more religious the participant, the more likely they were to volunteer to help—but only when it was unlikely that they would actually need to follow through.

Rather than suggesting that religion motivates people to inflate their socially desirable traits, Sedikides and Gebauer propose the opposite causal direction: the drive to self-enhance increases religiosity. People are generally prone to boosting their self-concepts via a variety of methods (e.g. downward social comparisons, discounting, self-handicapping, etc.). Sedikides and Gebauer conceptualize this tendency as a trait on which individuals vary, and propose that religiosity is a powerful means of self-enhancement. Individuals higher on the trait are more likely to seek out religion as part of their array of psychological tools to self-enhance.

Given that religious devotion is itself a socially desirable trait, at least in the United States, we might expect that those concerned with impression management would exaggerate their religiosity as well. Though it is difficult to discern the sincerity of levels of belief, a number of studies using a diverse set of methodologies have converged to show consistent overstatements in terms of religious attendance [22-24]. As a result, studies that show relationships between reports of religious attendance and reports of prosocial behavior may simply be distinguishing those

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who are low in self-enhancement from those who are apt to self-enhance on both dimensions.

Prosocial behavior may derive from the religious situation, not the religious disposition

Reporting biases likely explain part of why religiosity is associated with self-reported, but not behavioral, measures of prosociality. However, those behavioral measures may themselves misrepresent and understate the true relationship between religion and prosociality. Popular tools like the dictator game maximize internal validity and tightly isolate the construct under measure. But these tasks, performed in sterile and unfamiliar laboratory rooms, may not accurately capture the circumstances under which religion really does prompt individuals to engage in more generosity or cooperation. In other words, these lab-based experiments miss out on the religious situation—which may ultimately be more important for encouraging prosociality than the religious disposition.

Many elements commonly found in religions may have emerged and persisted due to the prosocial benefits that they afforded over time [25]. Much recent research has focused on the ability of two such elements—religious rituals and beliefs in punishing supernatural agents—to engender religious situations.

Religious Ritual

Rituals, both extravagant and mundane, are among the most conspicuous and time-intensive features of religious life. Though there is considerable diversity

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across the array of existing rituals, recurrent aspects hint at a non-random selection for features that proved individually and/or socially useful. For example, having groups of individuals performing actions in synchrony—common among religions (as well as militaries and other tightly knit groups)—has been shown to increase feelings of within-group affiliation, fusion, trust and cooperation (26-28).

Durkheim [29] famously described this outcome of ritual as "collective effervescence" and predicted its value for social cohesion. In an attempt to capture physiological evidence for collective effervescence, Konvalinka and colleagues [30] found that observers related to an individual walking across hot coals as part of an important high-arousal local ritual (but not those who were not related) developed synchronized heart rates with the fire-walker. Testing prosociality directly, Xygalatas and colleagues [31] found that both participating in and simply observing high-arousal Hindu rituals (involving painful body piercing) increased anonymous donations to the local temple. Furthermore, the level of pain experienced by the participants and pain perceived by the observers both predicted the amount donated.

Thus, while religious people are likely to find themselves moved to act prosocially by both routine synchronic rituals (such as hymn-singing and prostrated prayer) and less frequent high-arousal rituals (such as circumcision and body piercing), these types of religious situations are not present when prosociality is being behaviorally tested in the lab.

Supernatural Punishment

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The other factor long hypothesized to contribute to prosocial behavior among the religious is the belief in supernatural agents that monitor, judge and punish immoral behavior. People's compliance with prosocial norms can be highly dependent on their feelings of anonymity [32, 33]. Pervasive beliefs that morally concerned spirits and gods are watching even in situations void of earthly eyes may have dramatically increased prosociality within groups [34]. The prediction is supported by findings that religious priming increases feeling of surveillance [35] as well as generosity, cooperation, volunteerism, and honesty [36-39].

These effects are summarized and discussed in a recent meta-analysis of 25 studies (n=4825) testing religious priming effects on prosocial outcomes [40] (Figure 2). Notably, moderation analyses reveal that whereas God primes reliably increase these outcomes among religious believers, there is no effect for non-believers. In other words, the priming effects on prosociality are the product of the interaction of both situational (the presence of God primes) and dispositional (existing religious beliefs) factors.

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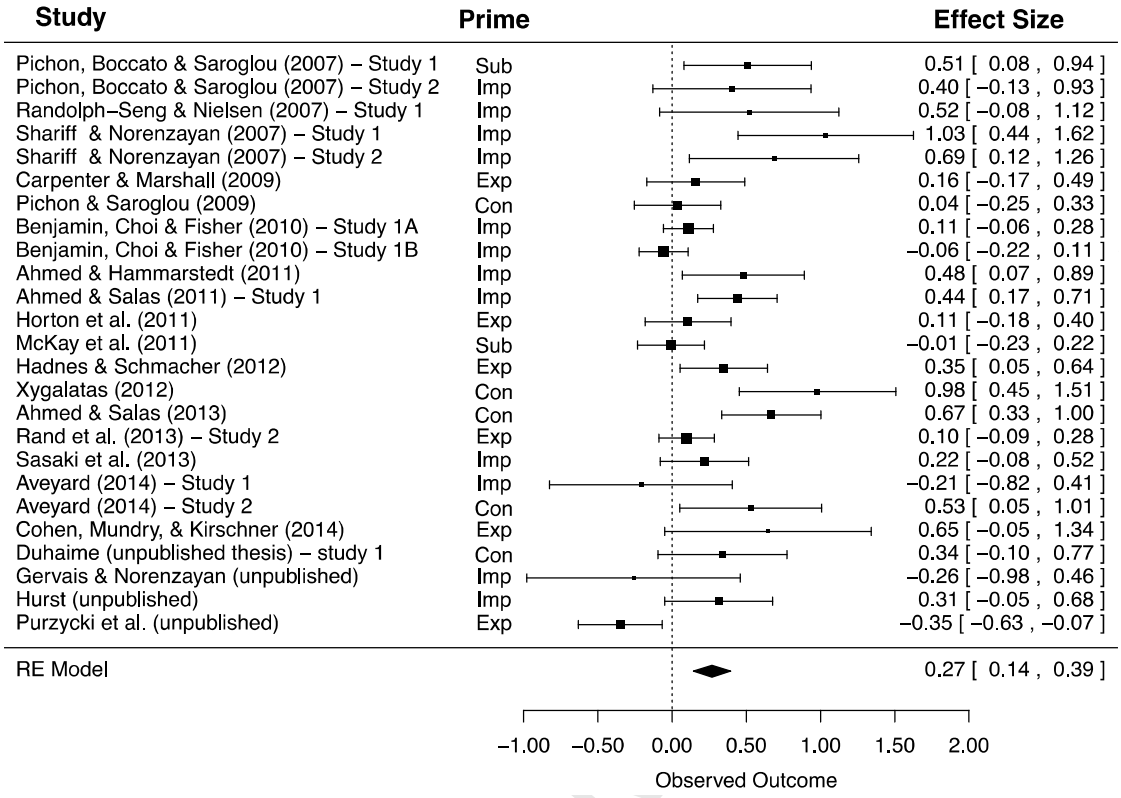

Figure 2: Meta-analysis of 25 studies testing the effect of religious priming on prosociality. From Shariff et al. [40].

Humans first, believers second

Furthermore, that religious participants only see a prosocial advantage in lab tests when they have been religiously primed, and not in control conditions, indicates that the religious do not exist in a state of being perpetually primed. The religious priming effect is ephemeral.

These boundary conditions are neatly displayed in Malhotra's [41] research on charity and "the Sunday Effect." Prior research had shown less pornographic

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website traffic in more religious American metropolitan areas, but only on Sundays [42]. Hypothesizing that Sunday may serve as a naturalistic religious prime for Christians, Malhotra investigated patterns of bidding in online charitable auctions throughout the week. In these auctions, potential donators must compete to be the highest bidder in order to donate, and they receive email alerts when they have been outbid, inviting them to submit a higher pledge. Malhotra found that when such emails were sent on Sundays, a much higher proportion of religious than non-religious individuals responded by rebidding. However, from Monday onwards, there was no longer any difference.

Other studies using 'real world' religious primes have found similarly short-lived effects. Duhaime (unpublished master's thesis, University of Cambridge) used a variant of the dictator game to study the charitability of shopkeepers in Marrakesh—noting the differences in behavior depending on when the *adhān*, the Muslim call to prayer, had last been sounded. As expected, shopkeepers were substantially more generous when the *adhān* was audible, but for those tested even 20 minutes later, the effect had worn off.

Conclusion

Does religion increase moral behavior? Yes. Even though the effect is parochial, bounded, transient, situationally constrained, and often overstated, it is real. And, following Critias, Voltaire, Marx & Durkheim [1-3, 29], many psychologists have argued that this religious prosociality effect was instrumental not just in

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religions' successes at becoming such pervasive and dominating institutions, but also for the stability of large-scale civilizations [25]. Without a compelling force constantly reminding group members to act prosocially, in the group's rather than one's own interest, large-scale cooperation may have been elusive—at least in what might be understood as pre-secular times. Today, many mostly areligious communities have leveraged relatively modern secular institutions of justice [39] and civilizing trends [43, 44] to function extremely well without a prosocial contribution from religion. Nevertheless, even today, the moral lives of billions of people are still shaped by the contours of their religious beliefs.

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References

1. Plato: Critias. In *The Collected Dialogues of Plato: Including the Letters, Vol. 71*. Edited by Hamilton E & Cairns H. Pantheon Books; 360 BCE/1961 CE.
2. Voltaire: Epître à l'auteur du livre des *Trois imposteurs*. In *OEuvres complètes de Voltaire*. Edited by Louis Moland. Garnier; 1768/1885:402-405.
3. Marx K: *Critique of Hegel's 'Philosophy of Right'.* Edited by Joseph O'Malley. Press Syndicate of the University of Cambridge, 1844/1970.
4. Hitchens C: *God Is Not Great*. Hachette Book Group; 2007.
5. McKay R & Whitehouse H. Religion and morality. *Psychol Bull* 2015, 141(2):447-473.
6. **Piazza J & Sousa P: Religiosity, political orientation, and consequentialist moral thinking. *Soc Psychol Personal Sci* 2013, doi: 10.1177/1948550613492826

   The authors present three studies showing that religiosity and political conservatism independently predict resistance to using consequentialist reasoning to determine moral permissibility. This resistance mediates the moral condemnation of 'harmless' taboo violations.
7. Piazza J & Landy J: "Lean not on your own understanding": Belief that morality is founded on divine authority and non-utilitarian moral thinking. *Judgm Decis Mak* 2015, 8(6):639-661.

Accepted Manuscript

ACCEPTED MANUSCRIPT

8. *Yilmaz O, & Bahçekapili H G: Without God, everything is permitted? The reciprocal influence of religious and meta-ethical beliefs. *J Exp Soc Psychol* 2015. doi:10.1016/j.jesp.2015.01.003

   Implicitly priming religious concepts was shown to shift meta-ethical beliefs towards the endorsement that morality is based in objective truths. A subsequent study suggests that arguments about the subjective nature of morality decrease certainty in the belief in God.

9. Haidt J, Graham, J. When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize. *Soc Justice Research* 2009.

10. Hall D L, Matz D C, Wood W: Why don't we practice what we preach? A meta-analytic review of religious racism. *Pers Soc Psychol Rev* 14(1):126-139.

11. Johnson M K, Rowatt W C, & LaBouff J: Priming Christian religious concepts increases racial prejudice. *Soc Psychol Personal Sci* 2010, 1:119-126.

12. Johnson M K, Rowatt W C, & LaBouff J P: Religiosity and prejudice revisited: In-group favoritism, out-group derogation, or both? *Psychol Relig Spiritual* 2012, 4:154-168.

13. LaBouff J P, Rowatt W C, Johnson M K, & Finkle C: Differences in attitudes toward outgroups in religious and nonreligious contexts in a multinational sample: A situational context priming study. *Int J Psychol Relig* 2012, 22:1-9.

Accepted Manuscript

ACCEPTED MANUSCRIPT

14. Saroglou V, Corneille O, & Van Cappellen P: "Speak, Lord, your servant is listening": Religious priming activates submissive thoughts and behaviors. *Int J Psychol Relig* 2009, 19:143-154.
15. Van Cappellen P, Corneille O, Cols S, & Saroglou V: Beyond mere compliance to authoritative figures: Religious priming increases conformity to informational influence among submissive people. *Int J Psychol Relig* 2011, 21:97-105.
16. Shariff A, Piazza J, & Kramer S: Morality and the religious mind: Why theists and nontheists differ. *Trends in Cogn Sci* 2014, 18(9):439-441.
17. Brooks AC: *Who Really Cares: The Surprising Truth About Compassionate Conservatism*. Basic Books; 2006.
18. Kramer & Shariff: Does religion make people good? Zeroing in on a definitive answer. *16th Annual Meeting of the Society for Personality and Social Psychology,* 2015.
19. Sedikides C & Gebauer J E: Religiosity as self-enhancement: A meta-analysis of the relation between socially desirable responding and religiosity. *Pers Soc Psychol Rev* 2010 14(1):17-36.
20. Trimble DE: The religious orientation scale: Review and meta-analysis of social desirability effects. *Educ Psychol Meas* 1997, 57(6):970-986.
21. Batson C D, Oleson K.C., Weeks J L, Healy S P, Reeves P J, Jennings P, & Brown T: Religious prosocial motivation: Is it altruistic or egoistic? J Personal Soc Psychol 1989, 57(5): 873.

Accepted Manuscript

ACCEPTED MANUSCRIPT

22. Brenner P S: Identity importance and the overreporting of religious service attendance: Multiple imputation of religious attendance using the American Time Use Study and the General Social Survey. *J Sci Study Relig* 2011, 50(1): 103-115.

23. Cox D, Jones R P, Navarro-Rivera J. I know what you did last Sunday: Measuring social desirability bias in self-reported religious behavior, belief, and identity. *Public Research Institute* 2014.

24. Hadaway C K, Marler P L, & Chaves M: What the polls don't show: A closer look at US church attendance. *Am Sociol Rev* 1993, 58(6):741-752.

25. **Norenzayan A, Shariff A F, Gervais W M, Willard A K, McNamara R, Slingerland E, & Henrich J: The cultural evolution of prosocial religions. *Behav Brain Sci* (in press), doi: http://dx.doi.org/10.1017/S0140525X14001356
An extensive theoretical review of the idea that the prosocial effects of religion were instrumental in stabilizing cooperation among large groups. Converging evidence from many lines of research is reviewed.

26. Hove M J & Risen J L: It's all in the timing: Interpersonal synchrony increases affiliation. *Soc Cogn* 2009, 27(6):949-960.

27. Swann Jr W B, Gómez A, Seyle D C, Morales J, & Huici C: Identity fusion: The interplay of personal and social identities in extreme group behavior. *J Personal Soc Psychol* 2009, 96(5):995.

28. Wiltermuth S S & Heath C: Synchrony and cooperation. *Psychol Sci* 2009, 20:1–5.

Accepted Manuscript

ACCEPTED MANUSCRIPT

29. Durkheim É: *The Elementary Forms of Religious Life*. Free Press, New York, 1912/1995.

30. Konvalinka I, Xygalatas D, Bulbulia J, Schjødt U, Jegindø E M, Wallot S, Van Orden G, & Roepstorff A: Synchronized arousal between performers and related spectators in a fire-walking ritual. *Proc Natl Acad Sci U S A* 2011, 108(20):8514-8519.

31. *Xygalatas D, Mitkidis P, Fischer R, Reddish P, Skewes J, Geertz A W, Roepstorff A & Bulbulia J: Extreme rituals promote prosociality. *Psychol Sci* 2013, 24:1602– 1605. doi:10.1177/0956797612472910.
A field study in Mauritius showing that both participants and observers of a high-ordeal religious ritual donated more money to the local temple in an economic game than did those involved in a low-ordeal ritual. Donations were correlated with subjective reports of perceived or experienced pain.

32. Haley K J & Fessler D M: Nobody's watching?: Subtle cues affect generosity in an anonymous economic game. *Evol Hum Behav* 2005, 26(3):245-256.

33. Hoffman E, McCabe K, & Smith V L: Social distance and other-regarding behavior in dictator games. *Am Econ Rev* 1994, 86(3):653-660.

34. Norenzayan A & Shariff A F: The origin and evolution of religious prosociality. *Science* 2008, 322(5898):58-62.

35. Gervais W M & Norenzayan A: Like a camera in the sky? Thinking about God increases public self-awareness and socially desirable responding. *J Exp Soc Psychol* 2012, 48:298-302.

Accepted Manuscript

ACCEPTED MANUSCRIPT

36. Ahmed A M & Salas O: Implicit influences of Christian religious representations on dictator and prisoner's dilemma game decisions. *J Socio Econ* 2011, 40:242-246.

37. Pichon I, Boccato G, & Saroglou V: Nonconscious influences of religion on prosociality: A priming study. *Eur J Soc Psychol* 2007, 37:1032-1045.

38. Randolph-Seng B & Nielsen M E: Honesty: One effect of primed religious representations. *Int J Psychol Relig* 2007, 17:303-315.

39. Shariff A F & Norenzayan A: God is watching you: Supernatural agent concepts increase prosocial behavior in an anonymous economic game. *Psychol Sci* 2007, 18:803- 809.

40. *Shariff A F, Willard A K, Andersen T, & Norenzayan A: Religious Priming: A meta-analysis with a focus on religious prosociality. *Personal Soc Psychol Rev* 2015, doi:10.1177/1088868314568811

A meta-analysis of 93 religious priming studies, including 25 religious priming studies that specifically have prosocial outcomes. For highly religious participants, religious priming's effect on prosociality is g=0.44. Religious priming does not appear to affect non-believers. Effect size analyses are supplemented by p-curves, which indicate no meaningful p-hacking.

41. Malhotra D K: (When) are religious people nicer? Religious salience and the 'Sunday Effect' on pro-social behavior. *Judgm Decis Mak* 2010, 5(2):138-143.

Accepted Manuscript

ACCEPTED MANUSCRIPT

42. Edelman B G: Red light states: Who buys online adult entertainment? *J Econ Perspect* 2009, 23(1):209-220.

43. Pinker S. *The Better Angels of Our Nature: The Decline of Violence in History and Its Causes*. Penguin UK; 2011.

44. Shermer M: *The Moral Arc: How Science and Reason Lead Humanity Toward Truth, Justice, and Freedom*. Macmillan; 2015.

Accepted Manuscript

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45.

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