

A likelihoodist appraisal of the Holy Spirit's influence

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This paper evaluates the claim that the Holy Spirit supernaturally indwells Christians and thereby imparts distinctive wisdom, righteousness, happiness, and miraculous ability. Framing the inquiry in likelihoodist terms, I ask which hypothesis better predicts the available evidence: (H_1) an omniscient, omnipotent Spirit actively influences believers, or (H_0) the observed phenomena are products of ordinary psychological and social processes. If H_1 were true, we should expect measurable patterns: greater doctrinal unity, superior decision-making, unusually low rates of antisocial behavior, uniquely elevated well-being, and verifiable miracles. The evidence instead shows persistent doctrinal diversity, mixed or null behavioral advantages, comparable well-being, and non-replicable miracle claims. On the likelihoodist appraisal, these observations are far more probable given H_0 than given H_1 . I conclude that the hypothesis of a supernaturally indwelling Holy Spirit is not supported by the balance of evidence, and that natural explanations better account for the data (Draper, 1989; Oppy, 2013; Royall, 1997).

Opening Narrative

Imagine a person who says an invisible genius inhabits them, guiding choices and granting special insight. Asked for evidence, they cite personal growth and a sense of peace. Yet similarly situated people who deny any such genius report comparable growth and peace; and the claimant demonstrates no knowledge or ability that exceeds ordinary human

limits. By ordinary evidential norms, we would withhold assent until reliable indicators emerge (Mackie, 1982). The same evidential standards should govern claims about the Holy Spirit. If an omniscient and omnipotent Being indwells believers, the effects should be discernible in stable, cross-sample patterns—not merely in testimonial warmth or confirmation-prone anecdotes (Barrett, 2004; Dawes, 2009; James, 2004).

Evaluation Criteria and Method

Following the likelihoodist approach, evidence supports the hypothesis under which it is more expected (Royall, 1997; Sober, 2008). I articulate domain-specific expectations E under H_1 and H_0 , then compare $L(E | H_1)$ and $L(E | H_0)$. The domains are: (a) *wisdom* (doctrinal consonance; decision quality; resistance to misinformation), (b) *righteousness* (crime, divorce, substance abuse; honesty and generosity under control conditions), (c) *happiness* (life satisfaction, depression/anxiety, suicide; stress resilience), and (d) *miracles* (medically verified healings, fulfilled high-specificity petitions, or feats violating physical constraints).

Operational indicators (preregisterable). To maximize discriminative power and avoid elastic expectations, each domain includes a concrete indicator and a minimal effect-size threshold that would move the likelihood ratio in favor of H_1 :

- *Wisdom:* (i) Doctrinal consonance index across core creedal propositions (across denominations); (ii) Brier score in public forecasting tournaments by self-identified Spirit-led forecasters. *Thresholds:* ≥ 0.30 SD advantage in calibrated decision-making net of SES/education; or $\Delta\text{Brier} \leq -0.05$ (lower is better) sustained across ≥ 2 seasons (Tetlock & Gardner, 2015).
- *Righteousness:* Registered crime/fraud outcomes (administrative data) and blinded honesty tasks with monetary stakes. *Thresholds:* adjusted odds ratios ≤ 0.80 for antisocial outcomes (net of age, SES, region, personality); ≥ 0.20 SD advantage on

blinded honesty tasks (Baier & Wright, 2001; Enke, 2012; Shariff & Norenzayan, 2007).

- *Happiness*: Well-being composites (life satisfaction; depression/anxiety) with social-support mediation modeled. *Threshold*: ≥ 0.25 SD net advantage after adjusting for community/social support, safety, and income (Diener et al., 2011; Koenig, 2012).
- *Miracles*: Pre-registered medical endpoints with blinded adjudication; multi-site replication; public raw data. *Thresholds*: pre-specified effect with two independent replications at $\alpha = .005$ (to control for researcher degrees of freedom), or Bayes factor > 10 across replications (Benson et al., 2006; Ritchie et al., 2012).

Design principles: To avoid confounds, comparisons should use large, preregistered samples when possible; control for age, education, income, region, personality traits, and social support; and prioritize behavioral measures over self-report where feasible. Where randomized designs are impossible, I rely on meta-analytic and cross-national evidence, interpreted cautiously (Baier & Wright, 2001; Diener et al., 2011; Koenig, 2012).

Core Evidence and Analysis

Wisdom

On H_1 , the Spirit's guidance should generate convergent understanding on central doctrines and measurable prudence in real-world decisions. Yet doctrinal pluralism is pervasive historically and contemporarily (McKim, 2001). If the same omniscient agent animates believers' cognition, persistent interdenominational disagreement is unexpected under H_1 but expected under H_0 , given ordinary hermeneutical diversity and motivated reasoning (Barrett, 2004). Decision-quality proxies likewise fail to show robust advantages for Christians once socioeconomic covariates are controlled; publicized anecdotes

notwithstanding, systematic evidence of superior practical prudence is lacking (Dawes, 2009). A forecasting angle further sharpens the point: under H_1 , Spirit-led forecasters should enjoy persistent edge in calibrated predictions, yet research on forecasting expertise shows gains derive from training, feedback, and probabilistic discipline rather than special insight (Tetlock & Gardner, 2015). Relatedly, analytic cognitive style modulates religious credence in ways consistent with ordinary cognition rather than supernatural infusion (Gervais & Norenzayan, 2012). Absent a Spirit-specific signature, the evidence favors H_0 .

Righteousness

If the Spirit sanctifies, believers should exhibit lower base-rates of antisocial behavior net of confounds. Meta-analytic work finds at best small, context-sensitive associations between religiosity and crime, with effects attenuating under stronger controls (Baier & Wright, 2001). Cross-national comparisons complicate triumphalist narratives: some of the safest, most prosocial countries are comparatively nonreligious, suggesting that civic institutions and socioeconomic factors, not supernatural transformation, chiefly explain variance (Zuckerman, 2009). Laboratory and field measures of honesty and altruism show mixed results; where religious primes help, effects are modest and reproduce with secular primes of surveillance or norms—again consistent with natural mechanisms (Enke, 2012; Norenzayan, 2013; Shariff & Norenzayan, 2007). Claims that religion uniquely enhances self-control are also consistent with ordinary self-regulatory processes tied to practices, norms, and social monitoring (McCullough & Willoughby, 2009).

Happiness

Claims of a distinctive “joy in the Spirit” predict unusually high well-being and resilience under adversity. Large-scale surveys report that religiosity correlates with some well-being indicators, but effects are inconsistent across contexts and substantially mediated by social support and community (Diener et al., 2011; Koenig, 2012). Where state capacity

is high and safety nets are robust, religiosity's advantage diminishes or reverses, indicating that the relevant causal work is socio-environmental rather than supernatural. Moreover, many nonreligious practices (e.g., meditation) yield comparable or superior affective benefits, consistent with ordinary psychological mechanisms (Sedlmeier et al., 2018). Null or context-bound advantages are more expected on H_0 than on H_1 .

Miracles

Canonical texts predict striking observable effects—healing on demand, dramatic signs, and highly specific answered petitions. Contemporary high-quality tests do not corroborate such effects. The multi-site STEP trial on intercessory prayer found no benefit—and a slight adverse effect when patients knew they were prayed for (Benson et al., 2006). Claimed healings typically lack adequate controls or medical verification; when scrutinized, they track placebo response, regression to the mean, expectancy, and reporting biases (Dawes, 2009; Hume, 2007). Reports of spectacular violations of physical law remain anecdotal. Given ubiquitous recording technology, the persistent absence of strong, replicable evidence weighs against H_1 . Attempts to generalize from controversial parapsychological findings fare poorly under independent replication (Ritchie et al., 2012). Replicable evidence would require preregistration, independent multi-site replication, and public raw data.

Comparative Likelihood Analysis

Let E denote the body of observations summarized above: enduring doctrinal diversity; mixed or null prosocial deltas after controls; context-dependent well-being; and non-replicable miracle claims. H_1 predicts salient, cross-context signals; H_0 predicts heterogeneity driven by ordinary mechanisms (cognition, culture, institutions). On any reasonable formalization, the likelihood ratio is

$$\Lambda = \frac{L(E | H_1)}{L(E | H_0)} < 1. \quad (1)$$

Annotation: This expresses how well each hypothesis predicts the observations. Values below 1 favor H_0 because the evidence is less expected if H_1 is true.

For multiple semi-independent domains E_1, \dots, E_k , cumulative evidence multiplies:

$$\Lambda_{\text{total}} = \prod_{i=1}^k \frac{L(E_i | H_1)}{L(E_i | H_0)}. \quad (2)$$

Annotation: Even modest domain-wise disadvantages for H_1 compound into strong overall evidence for H_0 .

Bayesianly, for any prior odds $O(H_1 : H_0)$,

$$O(H_1 : H_0 | E) = \Lambda O(H_1 : H_0). \quad (3)$$

Annotation: The likelihood ratio updates prior odds to posterior odds. When $\Lambda < 1$, the posterior odds for H_1 decrease.

Illustrative toy example: If $\lambda_{\text{wis}} = 0.7$, $\lambda_{\text{rig}} = 0.9$, $\lambda_{\text{hap}} = 0.8$, and $\lambda_{\text{mir}} = 0.6$, then

$$\Lambda_{\text{total}} = 0.7 \times 0.9 \times 0.8 \times 0.6 \approx 0.30,$$

so E is about $1/0.30 \approx 3.3$ times more expected on H_0 than on H_1 .

Dependence and robustness. We treat domains as approximately conditionally independent given each hypothesis; typical cross-domain correlations (e.g., institutional strength jointly affecting prosociality and well-being) would not rescue H_1 when each domain is at or below parity. A sensitivity check shows that for prior odds $O(H_1 : H_0)$ in $[1 : 1, 3 : 1]$ and domainwise bounds $\lambda_i \in [0.6, 0.95]$, posterior odds remain $\leq 1 : 1$ absent a $\lambda_j > 1$ in at least one domain of material weight.

Counterarguments and Responses

Hiddenness/Mystery. *Appeal:* God's ways are inscrutable. *Response:*

Inscrutability undercuts predictive power; a hypothesis with elastic expectations cannot be confirmed by success nor disconfirmed by failure, rendering it explanatorily idle (Dawes, 2009; Oppy, 2013).

Free Will. *Appeal:* Human autonomy obscures the Spirit's effects. *Response:* Autonomy does not erase population-level signatures—strong causes leave traces despite noise. If mentorship and institutions yield detectable deltas, a perfect guide should not be uniquely invisible (Draper, 1989; Plantinga, 2000).

Non-Material Goods. *Appeal:* The Spirit gives inner peace, not worldly outcomes. *Response:* Peace and resilience admit measurement and comparative baselines; their ordinary distribution and mediation by community fit H_0 better than H_1 (Diener et al., 2011; Koenig, 2012).

Testimony. *Appeal:* Millions attest to transformative experiences. *Response:* Cross-cultural parity of testimonial fervor and well-known cognitive biases limit probative value. When distinctively Christian content fails to exceed common human psychology, testimony lacks discriminatory power (Barrett, 2004; James, 2004).

Community Charity. *Appeal:* Christian service evidences the Spirit. *Response:* Prosocial institutions and secular NGOs produce comparable outcomes; parsimony favors sociological over supernatural explanations (Norenzayan, 2013; Zuckerman, 2009).

Discussion and Broader Implications

Two lessons emerge. First, evidential standards used in science and ordinary life should apply to religious claims: hypotheses that predict the world poorly wane in credibility. Second, naturalistic accounts—cognitive byproduct theories (Boyer, 2001), norm-enforcement models of religion (Norenzayan, 2013; Shariff & Norenzayan, 2007), and institutional explanations of social order—jointly explain why religious communities can flourish without invoking a supernatural agent. This does not deny that religious participation can provide meaning and social capital; it locates the causal story in ordinary mechanisms.

Conclusion

Under a fair likelihoodist reading, the observed world is the sort we expect if no supernaturally indwelling Spirit shapes believers' cognition, conduct, or well-being in distinctive, measurable ways. The contrary hypothesis predicts strong, cross-context signals that fail to appear. Pending new, robust evidence—for example, preregistered demonstrations of replicable healing effects or sustained forecasting advantages traceable to expressly spiritual practices—the balance of evidence supports natural psychological and social explanations. Confidence should be proportionate to evidence; at present, the weight points to H_0 .

References

- Baier, C. J., & Wright, B. R. E. (2001). "if you love me, keep my commandments": A meta-analysis of the effect of religion on crime. *Journal of Research in Crime and Delinquency*, 38(1), 3–21. <https://doi.org/10.1177/0022427801038001001>
- Barrett, J. L. (2004). *Why would anyone believe in God?* AltaMira Press.
- Benson, H., Dusek, J. A., Sherwood, J. B., Lam, P., Bethea, C. F., et al. (2006). Study of the therapeutic effects of intercessory prayer (STEP) in cardiac bypass patients: A randomized trial of uncertainty and certainty of receiving intercessory prayer. *New England Journal of Medicine*, 354(6), 553–560. <https://doi.org/10.1056/NEJMoa060202>
- Boyer, P. (2001). *Religion explained: The evolutionary origins of religious thought*. Basic Books.
- Dawes, G. W. (2009). *Theism and explanation*. Routledge. <https://doi.org/10.4324/9780203871309>
- Diener, E., Tay, L., & Myers, D. G. (2011). The religion paradox: If religion makes people happy, why are so many dropping out? *Journal of Personality and Social Psychology*, 101(6), 1278–1290. <https://doi.org/10.1037/a0024402>
- Draper, P. (1989). Pain and pleasure: An evidential problem for theists. *Noûs*, 23(3), 331–350. <https://doi.org/10.2307/2215486>
- Enke, B. (2012). Religious beliefs and social cooperation: Evidence from an experiment. *Journal of Economic Behavior & Organization*, 83(3), 241–250. <https://doi.org/10.1016/j.jebo.2012.05.002>
- Gervais, W. M., & Norenzayan, A. (2012). Analytic thinking promotes religious disbelief. *Science*, 336(6080), 493–496. <https://doi.org/10.1126/science.1215647>

- Hume, D. (2007). Of miracles [Original work published 1748]. In E. Steinberg (Ed.), *David Hume: An enquiry concerning human understanding* (pp. 104–123). Hackett.
- James, W. (2004). *The varieties of religious experience* [Original work published 1902]. Barnes & Noble Classics.
- Koenig, H. G. (2012). Religion, spirituality, and health: The research and clinical implications. *ISRN Psychiatry, 2012*, 278730. <https://doi.org/10.5402/2012/278730>
- Mackie, J. L. (1982). *The miracle of theism: Arguments for and against the existence of God*. Oxford University Press.
- McCullough, M. E., & Willoughby, B. L. B. (2009). Religion, self-regulation, and self-control: Associations, explanations, and implications. *Psychological Bulletin, 135*(1), 69–93. <https://doi.org/10.1037/a0014213>
- McKim, R. (2001). *Religious ambiguity and religious diversity*. Oxford University Press.
- Norenzayan, A. (2013). *Big gods: How religion transformed cooperation and conflict*. Princeton University Press.
- Oppy, G. (2013). *The best argument against God*. Palgrave Macmillan. <https://doi.org/10.1057/9781137302117>
- Plantinga, A. (2000). *Warranted Christian belief*. Oxford University Press.
- Ritchie, S. J., Wiseman, R., & French, C. C. (2012). Failing the future: Three unsuccessful attempts to replicate Bem's 'retroactive facilitation of recall' effect. *PLoS ONE, 7*(3), e33423. <https://doi.org/10.1371/journal.pone.0033423>
- Royall, R. (1997). *Statistical evidence: A likelihood paradigm*. Chapman & Hall/CRC.
- Sedlmeier, P., Eberth, J., Schwarz, M., Zimmermann, D., Haarig, F., Jaeger, S., & Kunze, S. (2018). The psychological effects of meditation: A meta-analysis. *Psychological Bulletin, 144*(11), 1185–1221. <https://doi.org/10.1037/bul0000168>

Shariff, A. F., & Norenzayan, A. (2007). God is watching you: Priming God concepts increases prosocial behavior in an anonymous economic game. *Psychological Science, 18*(9), 803–809. <https://doi.org/10.1111/j.1467-9280.2007.01983.x>

Sober, E. (2008). *Evidence and evolution: The logic behind the science*. Cambridge University Press.

Tetlock, P. E., & Gardner, D. (2015). *Superforecasting: The art and science of prediction*. Crown.

Zuckerman, P. (2009). *Society without God: What the least religious nations can tell us about contentment*. New York University Press.

Appendix

Formalization

Let the four empirical domains be E_1 (wisdom), E_2 (righteousness), E_3 (happiness), and E_4 (miracles). Under minimal dependence assumptions and domain-specific controls, define domain likelihood ratios $\lambda_i = L(E_i | H_1)/L(E_i | H_0)$. The overall evidential force in the likelihoodist sense is then $\Lambda_{\text{total}} = \prod_{i=1}^4 \lambda_i$. Empirically, the best-available meta-analytic and experimental assessments suggest $\lambda_i \lesssim 1$ in each domain; jointly, $\Lambda_{\text{total}} < 1$.

Plain-language note: This appendix summarizes the formal core. Each domain contributes a factor that nudges the evidence for or against H_1 . When all factors are near or below 1 in favor of H_0 , the cumulative effect weighs against H_1 .

Symbolic Logic Reconstruction

H_1 = Hypothesis that the Holy Spirit indwells believers and actively influences cognition, conduct, and well-being.
Annotation: H_1 represents the supernatural hypothesis.
 H_0 = Hypothesis that observed religious phenomena result solely from natural psychological and social processes.
Annotation: H_0 represents the naturalistic explanation.
 E = Body of evidence consisting of (i) persistent doctrinal diversity, (ii) mixed or null prosocial effects, (iii) context-dependent well-being, and (iv) absence of replicable miracles.
Annotation: E is the collective empirical data under consideration.

Likelihood Framework

$L(E|H_1)$ = Likelihood of observing E given H_1
Annotation: If the Holy Spirit exists and indwells believers, what is the probability of seeing the actual data?
 $L(E|H_0)$ = Likelihood of observing E given H_0
Annotation: If the phenomena are fully naturalistic, what is the probability of seeing the data?
 $\Lambda = \frac{L(E|H_1)}{L(E|H_0)}$
Annotation: Λ is the likelihood ratio, measuring evidential strength.

Domain-Specific Predictions

1. **Wisdom**
 $H_1 \rightarrow$ Doctrinal Convergence
 $H_0 \rightarrow$ Doctrinal Diversity
 Observation: Doctrinal Diversity.
 Thus, $L(\text{Doctrinal Diversity}|H_0) > L(\text{Doctrinal Diversity}|H_1)$

2. **Righteousness**
 $H_1 \rightarrow$ Low Crime, High Prosociality
 $H_0 \rightarrow$ Mixed or Contextual Effects
 Observation: Mixed/Contextual Effects.
 Thus, $L(\text{Mixed/Contextual Effects}|H_0) > L(\text{Mixed/Contextual Effects}|H_1)$

3. **Happiness**
 $H_1 \rightarrow$ Stable Elevated Well-Being
 $H_0 \rightarrow$ Context-Dependent Well-Being
 Observation: Context-Dependent Well-Being.
 Thus, $L(\text{Context-Dependent Well-Being}|H_0) > L(\text{Context-Dependent Well-Being}|H_1)$

4. **Miracles**
 $H_1 \rightarrow$ Replicable Supernatural Events
 $H_0 \rightarrow$ Absence of Replicable Supernatural Events
 Observation: Absence of Replicable Events.
 Thus, $L(\text{Absence of Replicable Events}|H_0) > L(\text{Absence of Replicable Events}|H_1)$

Aggregate Evidence

E = Doctrinal Diversity, Mixed Prosociality, Context-Dependent Well-Being, No Replicable Miracles
 $\Lambda = \frac{L(E|H_1)}{L(E|H_0)} < 1$
Annotation: The cumulative evidence is more expected under H_0 than under H_1 .

Conclusion

$\therefore E$ favors H_0 over H_1
Annotation: Therefore, the naturalistic hypothesis H_0 is better supported by the evidence than the supernatural hypothesis H_1 .

Fitch-Style Natural Deduction (Likelihoodist Core)

1. H_1
Annotation: H_1 is the hypothesis that a supernaturally-indwelling Holy Spirit actively shapes believers' cognition, conduct, and well-being.

2. H_0
Annotation: H_0 is the hypothesis that observed religious outcomes arise from ordinary psychological, social, and institutional processes.

3. $E \equiv E_w \wedge E_r \wedge E_n \wedge E_m$
Annotation: The total evidence E is conjoined from domain components: wisdom E_w , righteousness/prosociality E_r , happiness/well-being E_n , and miracles E_m .

4. E_w
Annotation: Observation: persistent doctrinal diversity and no systematic decision-quality advantage constitute E_w .

5. E_r
Annotation: Observation: mixed or context-sensitive prosocial deltas (attenuating under controls) constitute E_r .

6. E_n
Annotation: Observation: context-dependent well-being largely mediated by community/support constitutes E_n .

7. E_m
Annotation: Observation: non-replication of specific, testable miracle claims constitutes E_m .

8. Def: $L(X|Y)$
Annotation: $L(X|Y)$ denotes the likelihood of evidence X if hypothesis Y were true.

9. Def: $\Lambda(E) \equiv \frac{L(E|H_1)}{L(E|H_0)}$
Annotation: The likelihood ratio $\Lambda(E)$ measures whether E is more expected on H_1 or on H_0 .

10. $H_1 \rightarrow$ Doctrinal Convergence
Annotation: If H_1 were true, stable doctrinal alignment across believers would be expected.

11. $H_0 \rightarrow$ Doctrinal Diversity
Annotation: If H_0 were true, enduring doctrinal diversity is expected from ordinary hermeneutical variation and cognition.

12. From 4, 10–11: $L(E_w|H_0) > L(E_w|H_1)$
Annotation: Given observed diversity E_w , it is more expected under H_0 than under H_1 .

13. $H_1 \rightarrow$ Low Crime & Robust Prosociality (net controls)
Annotation: On H_1 , sanctification predicts clear population-level signals after covariate control.

14. $H_0 \rightarrow$ Mixed/Contextual Prosocial Effects
Annotation: On H_0 , heterogeneous social/institutional influences yield mixed effects.

15. From 5, 13–14: $L(E_r|H_0) > L(E_r|H_1)$
Annotation: The prosocial data E_r are better predicted by H_0 .

16. $H_1 \rightarrow$ Stably Elevated Well-Being
Annotation: A reliably imparted "joy/peace" would produce broadly elevated and stable well-being on H_1 .

17. $H_0 \rightarrow$ Context-Dependent Well-Being
Annotation: On H_0 , well-being tracks secular supports and context.

18. From 6, 16–17: $L(E_n|H_0) > L(E_n|H_1)$
Annotation: The well-being pattern E_n is more expected under H_0 .

19. $H_1 \rightarrow$ Replicable Supernatural Events
Annotation: On H_1 , we should observe replicable healings/signs with adequate controls.

20. $H_0 \rightarrow$ ~Replicable Supernatural Events
Annotation: On H_0 , such events should not replicate beyond placebo/expectancy/noise.

21. From 7, 19–20: $L(E_m|H_0) > L(E_m|H_1)$
Annotation: The miracle record E_m is more expected under H_0 .

22. Lemma : $(\forall i \in w, r, h, m) L(E_i|H_0) \geq L(E_i|H_1) \Rightarrow L(E|H_0) \geq L(E|H_1)$
Annotation: If each domain component E_i is at least as likely on H_0 as on H_1 , then their conjunction E is at least as likely on H_0 (mild dependence assumptions; standard evidential aggregation).

23. From 12, 15, 18, 21, 22: $L(E|H_0) > L(E|H_1)$
Annotation: Aggregating the domain inequalities yields a strict advantage for H_0 over H_1 on the total evidence E .

24. From 9, 23: $\Lambda(E) = \frac{L(E|H_1)}{L(E|H_0)} < 1$
Annotation: Since $L(E|H_1) < L(E|H_0)$, the likelihood ratio $\Lambda(E)$ is less than 1.

25. Likelihoodist Principle : $\Lambda(E) < 1 \Rightarrow E$ favors H_0 over H_1
Annotation: In likelihoodist terms, $\Lambda(E) < 1$ is precisely the condition for E to count as evidence for H_0 over H_1 .

26. From 24, 25: E favors H_0 over H_1
Annotation: Therefore, the observed world E evidentially supports the naturalistic hypothesis H_0 against the indwelling-Spirit hypothesis H_1 .

Figure A1

Extended Symbolic Logic Formulation.