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A Camel Through the Eye of a Needle: The Influence of the Prosperity Gospel on Financial Risk-Taking, Optimistic Bias, and Positive Emotion

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The prosperity gospel is one of the fastest growing religious movements in America. With popularized figures like Joel Osteen and Creflo Dollar performing services to sold-out stadiums, new converts are drawn by the optimism-infused messages of positivity and financial wealth. Here we offer a formal scientific test of prosperity gospel's impact on psychological functioning. In 2 experiments, we tested a set of hypotheses related to the prosperity gospel's effects on financial risk-taking and positivity bias. The findings revealed that prosperity gospel messages generate heightened optimistic bias (Experiments 1 and 2), high arousal positive affect (Experiment 2), and financial risk-taking (Experiment 1). The results also indicated that even a secularized version of prosperity gospel leads to positivity bias, for both theists *and* atheists. This suggests the effectiveness of prosperity gospel lies in its ability to evoke positive states rather than communicate specifically religious teachings.

Keywords: prosperity gospel, optimistic bias, religion, riskiness

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The prosperity gospel movement, which teaches its followers that God wants people to be prosperous, has grown in recent years, both within the United States and in countries worldwide (Hunt, 2000). It attracts followers with promises of financial gain and spiritual fulfillment. Despite its growing popularity, there is currently little empirical research on the effects of the prosperity gospel. What impact, if any, does it have on people's psychological functioning?

The current investigation aims to begin addressing this gap in the literature. Positing that the prosperity gospel operates by directly focusing on heightened positive mental states and the pursuit of material wealth, we reasoned that (a) exposure to the prosperity gospel can heighten financial riskiness; and (b) such influence is not because of its religious teachings, but rather its evoking feelings of positivity and motivated optimism.

Religion's Impact on Psychological Functioning

The cognitive science of religion has made great advances as an interdisciplinary study of the interactions between religion and basic cognitive functions, especially with regards to how the effects of religion can be explained at the cognitive level (Barrett, 2000; Boyer, 2001). There is now mounting experimental evidence suggesting that religion is responsible for shaping both individual and group-based thoughts or behaviors (for a meta-analysis on experimental findings, see Shariff, Willard, Andersen, & Norenzayan, 2015).

Previous research has found that religion serves as a powerful buffer against anxiety (Newton & McIntosh, 2010), by offering a set of practices and beliefs that guard against uncertainty (Kay, Gaucher, McGregor, & Nash, 2010). Religion offers believers ways to make sense of the world and find purpose in life, often during times of psychological stress (Ellison, Boardman, Williams, & Jackson, 2001; Park, 2013). Religious practitioners also receive increased social support from their fellow believers (Wang, Koenig, Ma, & Al Shohaib, 2016), but in at least some cases the benefits of religion may be because of the themes of the messages themselves (Bowen, Baetz, & D'Arcy, 2006). Here we investigate the effects of one such message, the prosperity gospel, on people's cognitions, emotions, and behaviors.

What Is the Prosperity Gospel?

The prosperity gospel grew out of the 1950s grassroots Christian revival scene. The boom in prosperity gospel movements resulted from the popularization of "televangelical" figures such as Joel Osteen, Creflo Dollar, and T.D. Jakes (Bowler, 2013). In a *Time* poll, 17% of polled American Christians considered themselves followers of the prosperity gospel; 61% said they believed God wants them to be prosperous and rich; and 31% supported the notion that giving your money to God would lead to God giving you more money in return (Van Biema & Chu, 2006). The movement appeals even to people of nondenominational or even non-

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Christian leanings (Jeffress, 2017), and represents one of the fastest growing belief systems in the United States (Bowler, 2013; Hunt, 2000).

The central doctrine of the prosperity gospel is that God wants a person to be blessed. It says that material blessings are part of God's will, and to benefit from these blessings, a person must (a) demonstrate positive thought or speech on a regular basis and (b) donate a certain amount of money to the church ministry. With alternative names like "seed faith" and "health and wealth faith," the majority of the prosperity gospel's followers believe that sowing a seed (i.e., investing money in the way of church donations) will help them reap a future harvest (i.e., getting the larger return on their money through God's blessings; Hunt, 1998, 2000).

Though the prosperity gospel is typically associated with the desire for wealth, for some, a person can become prosperous in other ways, like through family life, health, and vocational duties. Whichever form of prosperity is desired, the teachings are generally in favor of "positive confessions," or the speaking or thinking of right words or thoughts, over the "negative confessions" of traditional Christian doctrine (Hollinger, 1991; Hunt, 1998).

The above suggests that the prosperity gospel impacts believers' optimism, positive mood, and financial decision-making. With teachings centered on financial prosperity, material wealth, and ministry donations, we expect that the prosperity gospel impacts financial decision-making and risk-taking by creating motivational feel-good states such as heightened optimism and positive affect. It follows that although a religious, nonprosperity message should be agreed with more across a general religious population, and the prosperity message imparts its own unique effects: inflating optimistic bias, arousing intense positive emotions, and heightening riskiness.

Overview of Research

In the following experiments we exposed participants to a version of a prosperity gospel message, measuring (a) level of message agreement, (b) optimistic attitudes and positive affect in response to the message, and (c) financial risk-related behaviors afterward. Experiment 1 compared a prosperity message to a control message to determine whether the prosperity gospel is linked to greater optimistic bias, and tested whether this mediated a link between the prosperity gospel and hypothetical and actual financial risk-taking. Experiment 2 examined the role of a related psychological construct, high-arousal positive emotion, in the prosperity gospel experiences and sought to investigate whether the proposed effects held even when presented to an atheist audience.

In particular, we tested the following hypotheses:

Hypothesis 1a: Participants exposed to prosperity gospel messages will demonstrate higher levels of positive future outlook (i.e., optimistic bias).

Hypothesis 1b: Participants exposed to prosperity gospel messages will demonstrate higher levels of positive mood states (i.e., high-arousal positive affect).

Hypothesis 2: Prosperity gospel messages will be agreed with less compared with nonprosperity religious messages.

Hypothesis 3: Participants exposed to prosperity gospel messages will demonstrate heightened financial risk-taking, an effect explainable by the proposed inflated optimistic bias.

Because of spatial constraints, only findings directly relevant to the hypotheses are reported here. However, the novel nature of the present experiments resulted in a number of interesting findings unrelated to study's hypotheses, including the effect of prior familiarity with Joel Osteen, accounted for in the experiments presented here, a delayed discounting task, and measurements of other affective valences. In the interests of transparency, the complete methods, analytics procedures, and results of these additional findings are available upon request.

Experiment 1

Experiment 1 aimed to test H1a, H2, and H3. As mentioned earlier, a central tenet of the prosperity gospel teaching is the assumption that if people donates their money to the ministry, their life will be made (more) prosperous from being in God's favor. Such donations involve some risk: People invest in the church with no guarantee of enjoying future prosperity. Drawing the link between charity donations and riskiness and the known connection between optimism and risk-taking (e.g., Gibson & Sanbonmatsu, 2004), we examined the effects of the prosperity gospel on optimism, planned church donations (representing hypothetical financial risk taking), and real financial risk-taking.

Method

Participants and procedures. American participants were screened using Amazon's Mechanical Turk (MTurk, for a review, see Paolacci & Chandler, 2014), answering questions ostensibly related to personality, demographics, and beliefs. The survey included four items related to religiosity and belief in God to screen for religiosity: (a) "I see myself as a believer in a God/Supernatural Being" (b) "I see myself as an atheist" (reverse scored) (c) I see myself as subscribing to a religious or spiritual belief system" and (d) "I see myself as more secular than religious" (reverse scored). The survey also included a number of filler items to occlude the eligibility requirements and purpose of the main follow-up study. To be eligible, participants had to have responded on one of the two highest points of the 7-point Likert scale (6 = *agree* and 7 = *strongly agree*) separately for all four religious items. These people were asked to share their e-mail contact if interested in doing a follow-up study. There were 289 participants who followed a link to complete the follow-up survey provided 1 week after initial screening, to help mask the purpose of the study. None of the participants said they were aware of the study's purpose and so none were excluded from analyses. Participants who completed the follow-up survey were paid 70 cents and told this could be increased through bonuses based on their survey responses. Participants were debriefed on completion of the follow-up.

Because of unforeseen technical errors in our behavioral dependent measure, a large portion of this total sample did not complete the experiment in full. Thus, we analyzed the available data using two samples: The initial sample consisted of 289 participants (118 men, 170 women, 1 unreported; $M_{age} = 39.50$, $SD = 11.97$). The reduced sample (i.e., including only those who were able to com-

plete the behavioral risk measure) consisted of 168 participants (73 men, 94 women, 1 unreported; M_{age} = 39.61, SD = 11.80). The initial sample size was determined through an a priori power analysis (*G*Power*; Faul, Erdfelder, Lang, & Buchner, 2007), using a small-to-medium effect of d = 0.35. The hypothesized omnibus one-way effect (on optimistic bias score) could achieve 85% power with 280 participants. Therefore, we stopped data collection when our final sample reached this point. The a priori power analysis for the mixed within or between effect (on the behavioral risk-taking measure) assumed a smaller effect of d = 0.3 as a conservative estimate. This showed that 90% power could be achieved with 186 participants. Thus, after the exclusions (reduced sample N = 168) the experiment remained adequately powered.

Participants were randomly assigned to one of three conditions: A prosperity message condition (n = 52), a nonprosperity message condition (n = 49), and a no-message control condition (n = 67). In the prosperity message condition, participants watched a 3-min video of popular preacher, Joel Osteen, speaking about prosperity-related topics like aspiring to achieve personal and spiritual wealth, love, and health. In the nonprosperity message condition, participants also watched a 3-min video of Joel Osteen from the same sermon, but in this case the nonprosperity message included stories related to general spirituality, nothing explicitly related to prosperity. The excerpts from each video can be found in the supplementary material. Lastly, in the no-message control condition, participants did not watch a video, serving as a baseline control.

To minimize demand characteristics, the study was explained as having two parts. Participants were told that in the first part they would watch a randomized video on one of four possible topics (religion, morality, politics, or economics). In reality, the video was always on the topic of religion. To check suspicion, participants indicated which of the four topics their video covered and gave an open-ended answer for what they thought the video's message was about. Participants in the no-message control condition moved directly to the second part of the study.

Using a piloted pretest on MTurk, the new videos were given two different ratings by a separate sample (N = 44) on their content related to prosperity or wealth and messages about religion, respectively, using a 0 = *not at all about prosperity*; *not at all about religion* to 10 = *very much about prosperity*; *very much about religion* scale. The pilot analyses confirmed that the prosperity message video was judged as having content more about prosperity and wealth (M = 8.28) compared with the control message video (M = 3.35), $t(43) = 8.68$, $p < .0001$. An interesting find was that the prosperity message video was also judged as being *less* religious (M = 7.50) than the control message video (M = 8.23), $t(43) = -2.10$, $p = .04$.

For the second part participants were told they would answer questions about their personal decision-making and goal-setting. Borrowing language from previous research (e.g., Heine & Lehman, 1995; for a review see Shepperd, Klein, Waters, & Weinstein, 2013), we provided participants with the following instructions: "The questions below ask you to think about your future and various life events, but importantly, to think about these things in comparison to others." There were nine separate items, with each one reading: "Relative to others, in the near future, your [item here] will be:" The items included happiness or well-being, meaning in life, physical health, financial success, financial stability, status of wealth, comfort of living, job security, and luck. The scale points included −2 = *much less/worse than others*, −1 = *slightly less/worse than others*, 0 = *equal to others*, 1 = *slightly more/better than others*, and 2 = *much more/better than others*. Thus, any group mean that significantly differs positively from 0 indicates an optimistic bias. Lastly, the nine bias items were collapsed (Cronbach's α = .90) to create an aggregate bias score that we used for analyses. To test the effect of prosperity messages on induced risk-taking, participants completed the risky-gains financial decision-making task (Leland & Paulus, 2005; Paulus, Rogalsky, Simmons, Feinstein, & Stein, 2003). Participants were told that we were interested in measuring their personalized decision-making.

On each trial, participants were presented with three value points in ascending order (20, 40, and 80 points). Each number was presented on screen for 2 s. If a button was pressed while that number appeared on screen participants banked that point value (20, 40, or 80). On each individual trial participants were faced with strategic choices, varying in their level of riskiness: they could (a) choose the small safe 20 amount (no risk), (b) forego the 20 amount and risk the 40 gain (moderate risk), or if they successfully got the 40 amount, then either accept the 40 amount or forego it for the 80 gain (highest risk).

Actual financial risk-taking was operationalized in two related ways: The decision made on a current trial, and as the decision made on any subsequent trial in which the preceding trial resulted in a gained reward. Participants believed that their decisions could lead to real bonus pay. They were told to try and earn as many points as possible and that a weighted average would be taken from their final score and applied to their account as bonus pay. In reality, the task was programmed so that the probabilities of 40 and 80 point losses were equal, which resulted in all participants' final scores being the same regardless of their choices, with all participants receiving the same amount of money. Participants completed a total of 48 trials and their choices were recorded with Millisecond's Inquisit 4.0.0.1 (Seattle, WA).

To investigate the hypothesized link between optimistic bias or actual financial risk-taking and willingness to donate to church charity, or hypothetical financial risk-taking, participants were asked how much money they planned to donate to their ministry or church over the next year. They indicated their response on a 1 (*no money*) to 9 (*greater than $10,000*) scale. Participants were then thanked and fully debriefed.

Results and Discussion

Though the study was advertised on MTurk to Christians only, a subset of participants identified as non-Christian (50 of the original sample; 3 Jewish, 1 Muslim, 16 Agnostic, 5 Buddhist, 4 nondenominational, and 21 other). As not all prosperity gospel practitioners are Christian, with many identifying as spiritual, agnostic, and/or nondenominational (Jeffress, 2017), we chose to include all participants who completed the behavioral measures in the analyses.

Optimistic bias (H1a). Supporting H1a, we found a main effect of condition, $F(2, 286) = 6.16$, $p = .002$, $\eta^2 = 0.04$, indicating that participants showed differences in bias between the conditions. Pairwise comparisons revealed that participants in the prosperity message condition reported an exaggerated bias

($M_{\text{prosperity.message}} = 0.33$, $SD_{\text{prosperity.message}} = 0.75$) compared with participants in both the nonprosperity message condition ($M_{\text{control.message}} = 0.10$, $SD_{\text{control.message}} = 0.70$), $t(286) = 2.09$, $p = .037$, Cohen's $d = 0.32$, and the no-message control condition ($M_{\text{no.message}} = -0.04$, $SD_{\text{no.message}} = 0.79$), $t(286) = 3.48$, $p = .001$, Cohen's $d = 0.48$. This difference replicated in the reduced sample, $F(2, 156) = 4.96$, $p = .008$.

Message agreement (H2). Supporting H2, we found that participants agreed less with the prosperity message ($M = 3.29$, $SD = 1.28$) than the nonprosperity message ($M = 3.69$, $SD = 0.96$), $F(1, 184) = 5.62$, $p = .02$, $\eta_P^2 = 0.03$. Religious (nonprosperity) messages from a preacher were agreed with more than were messages about prosperity, even though the prosperity message predicted higher optimistic bias.

Risky gains and planned church donations (H3). We then examined whether exposure to the prosperity gospel would lead to increased risk-taking on both real and hypothetical financial risk-taking. First, looking at the risky gains task, assessing real financial risk-taking, participants' responses were entered into a repeated-measures analysis of variance (ANOVA), with choice (e.g., 20 points, 40 points, and 80 points) as the repeated factor and condition assignment as the between-subjects factor. Results showed a large main effect of choice, $F(2, 164) = 397$, $p < .0001$, such that across conditions, participants chose the guaranteed 20 point option much more often than the risky 40 and 80 point options. Most important, this effect was qualified by a significant interaction between choice and condition, $F(2, 164) = 2.79$, $p = .026$, $\eta_P^2 = .03$.

Pairwise comparisons indicated that participants in the prosperity message condition chose the safe 20 point option significantly less ($M_{\text{prosperity.message}} = 23.29$, $SD_{\text{prosperity.message}} = 13.43$) than the no-message condition ($M_{\text{no.message}} = 28.22$, $SD_{\text{no.message}} = 13.12$), $t(164) = 1.97$, $p = .05$, Cohen's $d = 0.37$, but not significantly less than the nonprosperity message condition ($M_{\text{control.message}} = 26.74$, $SD_{\text{control.message}} = 13.94$), $t(164) = 0.60$, $p = .60$, Cohen's $d = 0.25$. The 40 point choice did not differ between conditions, all ps $> .46$ ($M_{\text{prosperity.message}} = 18.31$, $M_{\text{control.message}} = 17.40$, $M_{\text{no.message}} = 16.78$). Finally, participants in the prosperity message condition chose the riskiest 80 point option roughly twice as often ($M_{\text{prosperity.message}} = 6.40$, $SD_{\text{prosperity.message}} = 7.13$), compared with both the nonprosperity message condition ($M_{\text{control.message}} = 3.82$, $SD_{\text{control.message}} = 5.75$), $t(164) = 2.34$, $p = .02$, Cohen's $d = 0.40$, and the control no-message condition ($M_{\text{no.message}} = 3.00$, $SD_{\text{no.message}} = 3.42$), $t(164) = 3.26$, $p = .001$, Cohen's $d = 0.61$.

Looking at the second measure of riskiness, we examined the likelihood of participants taking a risk on the current trial (trial n) after the previous trial (trial n-1) was a reward (i.e., whether participants were willing to bet that they would gain a reward two trials in a row). There was again a significant interaction between response and condition, $F(2, 164) = 2.75$, $p = .028$, $\eta_P^2 = .03$, whereby participants in the prosperity message condition made the riskiest 80 point trial decision more often after winning (26.4% of the time) compared with both the nonprosperity (19% of the time), $t(164) = 2.24$, $p = .026$, Cohen's $d = 0.41$, and no-message condition (16.7% of the time), $t(164) = 3.13$, $p = .002$, Cohen's $d = 0.58$.

Next, examining hypothetical financial risk-taking through anticipated church donations, there was a slight positive skew to the scaling on the church donations. After applying a natural log transformation to account for this, there was a nonsignificant effect, ($F(2, 248) = 1.12$, $p = .33$, $\eta_P^2 = 0.009$). However, there was a significant effect in the reduced sample, $F(2, 156) = 4.67$, $p = .01$, $\eta_P^2 = 0.056$, despite the analysis having less statistical power. In this reduced sample, participants in the prosperity message condition planned to donate more of their own money in the next coming year than participants in both the nonprosperity message condition, $t(156) = 2.80$, $p = .016$, and no-message condition, $t(156) = 2.52$, $p = .034$. The post hoc tests in the full sample were also consistent despite a nonsignificant omnibus test. Specifically, participants in the prosperity message condition planned to donate marginally more money than participants in the nonprosperity message condition, $t(248) = 1.94$, $p = .054$, and no-message condition, $t(248) = 1.64$, $p = .10$.

There was a significant correlation with overall optimistic bias and anticipated donations, $r(249) = .16$, $p = .01$, suggesting that those who showed the most inflated sense of optimistic bias said they planned to donate more to their church in the coming year. Similarly, there was a significant positive correlation with the 80 point risky choice on the gambling task and anticipated church donations for participants in the prosperity message condition, $r(49) = .28$, $p = .05$, but not for participants in the nonprosperity message condition, $r(48) = -.05$, $p = .73$ or the no-message control condition, $r(62) = .12$, $p = .34$.

To find evidence consistent with mechanism, we next tested whether optimistic bias could explain the observed differences in hypothetical financial risk-taking. To avoid the assumption of significance in a traditional mediation model, an indirect effects model (Holmbeck, 1997) was done using the MEDIATE add-in function for SPSS (Hayes, 2013). Looking at anticipated church donations, with three conditions we modeled the data as the effect of condition, here a multicategorical independent variable (Hayes & Preacher, 2014), on anticipated donations *through* optimistic bias score. The significance of the relative indirect effects (k-1 contrast coded variables) were tested using a bootstrap analysis with 10,000 samples to obtain parameter estimates. A 95% confidence interval (CI) that did not include zero indicated a statistically significant indirect effect (Preacher & Hayes, 2008). The results showed a significant indirect effect (95% CI [0.008, 0.332]), suggesting that the effect of the prosperity message on people's plan to donate more of their own money was predicted by their heightened sense of optimistic bias (see Figure 1 for the illustrated model with paths).

The same model was run on the risky-gains task. Despite positive correlation between optimistic bias and the 80 point risky choice in the prosperity message condition, the overall correlation collapsed across the three conditions was not significant. Therefore, we did not test for any indirect effects with optimistic bias and real financial risk-taking

Experiment 1 demonstrates the effects of the prosperity gospel on heightened optimistic bias (H1a) and lower agreement with the prosperity message than the nonprosperity message (H2). We also found that the inflated optimistic bias in response to the prosperity message causes increased financial riskiness (H3) as indicated by an increased willingness to donate more money to a church ministry and greater risk-taking on a gambling task. However, in assessing the link between optimistic bias and risk-taking, we found only partial support for evidence of mechanism. The indirect

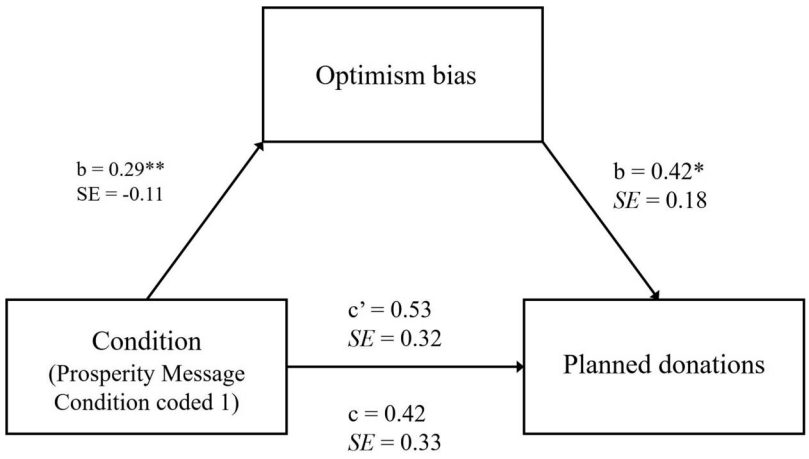

Figure 1. A multicategorical mediation model with optimistic bias as a mediator of the relationship between experimental condition (prosperity message, nonprosperity message, and no-message control) and planned church donations. Unstandardized regression coefficients (and associated *SE*s) from a bootstrap procedure are provided along each of the paths (* $p < .05$. ** $p < .01$.).

effect of the prosperity gospel through optimistic bias held only for anticipated church donations but not for actual risk-taking.

Experiment 2

Experiment 1 provided modest evidence that the prosperity gospel causes heightened optimistic bias (H1a) and risky financial behaviors (H3), even though people agree with its messages less (H2). Here we examine whether high-arousal positive affect (a construct related to sensation-seeking and risk-taking) would be affected similarly to optimistic bias. Optimism and high-arousal positive affect are thought to share a common cognitive basis, with both linked to broadened attentional focus and global information processing (Basso, Schefft, Ris, & Dember, 1996; Fredrickson, 1998). Additionally, high-arousal positive affect is predominately tied to Western Christian religions (Tsai, Miao, & Seppala, 2007), especially evangelical traditions. Similar to optimistic bias, we hypothesized that the prosperity gospel would induce high-arousal positive affect (H1b).

We further wanted to investigate the role of religious content in the prosperity gospel. By masking the identity of Joel Osteen, and thereby masking his identity as a preacher, we were able to alter the amount of religion or God concepts contained within the experimental primes. This allowed us to test the robustness of our hypotheses by showing that the prosperity gospel's impact has less to do with religion content and more to do with positive psychological states. In the piloted pretest of Experiment 1, we found the prosperity message video was rated as *less* religious than the nonprosperity control message video. We reasoned that the religious subtext may not actually be required for the prosperity gospel to have an effect.

However, first we wanted to compare a secularized version (with religious subtext removed) to the original (religious) prosperity message prime used in the two previous experiments. To do this we ran a pilot study comparing the two framing primes on heightened optimistic bias. We also compared the response from both theists and atheists. If the religious subtext is not a requirement, then we should see equally heightened optimistic bias from atheists when they are exposed to the secularized message.

Pilot Study

There were 125 atheists and 86 theists (77 men, 134 women; M_{age} = 37.17, SD = 11.86) who listened to the same audio recording and answered questions related to its message. We used the same excerpt from the video recording in the prosperity message condition in Experiment 2, but edited out any religious words and concepts (e.g., spirit, scripture, Jesus, and Bible), leaving the majority of its messages intact. The edited clip was sufficiently ambiguous to permit religious or nonreligious interpretations. Participants were randomly assigned to either a religious-framing condition in which they were informed that the clip came from a recording of a sermon, or secular-framing condition in which they were informed that it was a motivational speech. To mask the identity of Joel Osteen, the voice tone and rate in the recordings were lowered in pitch. After listening to the recording, participants answered the same optimistic bias questions (Cronbach's α = .91). The instructions for both framings can be found in the supplementary material.

Results and discussion. First, there was a main effect of religiosity, $F(1, 207) = 8.39$, $p < .0001$, $\eta^2 = 0.04$, such that across framing conditions, theists showed more optimistic bias (M = 0.46, SD = 0.79) than atheists (M = 0.14, SD = 0.77). For the main test, there was no effect of framing condition, $F(1, 207) = 0.03$, $p = .86$, confirming our prediction that there is no difference between the religiously framed and secularly framed prosperity messages; both lead to equally high optimistic bias across theists and atheists. Pairwise comparisons showed that the bias in theists was equally large across both framing conditions ($M_{\text{religious framing}}$ = 0.50; $M_{\text{secular framing}}$ = 0.43), $t(207) = 0.41$, $p = .68$, Cohen's d = 0.09. Atheists also did not differ across framing conditions ($M_{\text{religious framing}}$ = 0.09, $M_{\text{secular framing}}$ = 0.20). Furthermore, looking at comparisons within framing condition, results revealed that theists had greater optimistic bias in the

religious framing compared with atheists, $t(207) = 2.86$, $p = .005$, Cohen's $d = 0.55$, but atheists showed no significant difference in bias relative to theists in the secular framing condition, $t(207) = 1.37$, $p = .17$, Cohen's $d = 0.30$. That is, when atheists were exposed to the prosperity gospel message but told that it was a nonreligious motivational speaker, their level of optimistic bias was no different than that of theists.

It appears from these results that the prosperity gospel does not require religious subtext to have an effect on optimistic bias. With this in mind, the goal of Experiment 2 was to test the strength of our hypotheses by again comparing the response of atheists and theists to the secularized version of the prosperity message. The final hypothesis added here—the impact on positive mood states (H1b)—examined the extent to which high-arousal positive affect plays a unique role.

Participants and procedures. We screened and recruited American participants on Amazon's MTurk. Like in the previous pilot test, we screened for strong believers (theists) and strong nonbelievers (atheists). The same screening survey was given with respondents receiving 10 cents for completion. A total of 345 atheists and 315 theists qualified and were emailed a survey link a week after the screening survey (to minimize suspicion), asking them to complete the follow-up questionnaire. Participants were paid 70 cents for completing the follow-up survey. Of those who qualified, 197 theists and 240 atheists ($N = 437$) logged in to complete the follow-up study. Twenty-five participants were excluded from analyses because they recognized the voice of Joel Osteen ($n = 13$) or had large portions of missing and skipped data ($n = 12$). The final sample ($N = 412$) was comprised of 177 theists and 235 atheists, randomly assigned to a prosperity message condition ($n = 124$), a nonprosperity message condition ($n = 137$), or a no-message control condition ($n = 151$). An a priori power analysis (Faul et al., 2007) using a small-to-medium effect of $d = 0.35$ revealed that the hypothesized between-subjects effects could achieve 80% power with roughly 400 participants. The final sample ($N = 412$) is, therefore, sufficiently powered.

The same cover story was used as in the previous experiments. In part one, participants listened to the same edited audio clip with a secular framing from the Pilot Study. For the nonprosperity message condition, we edited a series of sound clips that contained a number of light-hearted stories told by Joel Osteen, which offered a match in positive affect and an effective control for positive valence.

For part two, participants were given the exact same instructions, cover story and optimistic bias items as the previous experiments (aggregate optimistic bias score, Cronbach's $\alpha = .88$). Next, leveraging the dimensional and circumplex theory of emotions (e.g., Russell, 1980, 2003; Watson, Wiese, Vaidya, & Tellegen, 1999), participants were asked to rate on a scale from 1 = *not at all* to 5 = *a great deal* their current experience of listed emotions. Items capturing high-arousal positive affect ("excited," "elated," "enthusiastic," "euphoric," "energized," "gleeful," and "inspired") were averaged together to create an aggregate emotion score (Cronbach's $\alpha = .96$).

Results and Discussion

Optimistic bias (H1a). First, there was a main effect of belief, $F(1, 406) = 8.70$, $p = .003$, $\eta^2 = 0.02$, indicating that across all three conditions, theists showed greater optimistic bias ($M = 0.41$, $SD = 0.75$) than atheists ($M = 0.19$, $SD = 0.74$). Critically, replicating the effect of the prosperity gospel on optimistic bias (H1a), there was a main effect of condition, $F(2, 406) = 6.78$, $p = .001$, $\eta^2 = 0.03$. As hypothesized, pairwise comparisons indicated that the prosperity message condition led to greater optimistic bias ($M = 0.49$, $SD = 0.75$) compared with both the nonprosperity message ($M = 0.15$, $SD = 0.74$) and no-message control conditions ($M = 0.27$, $SD = 0.74$), $t(406) = 3.63$, $p < .0001$, Cohen's $d = 0.46$, and, $t(406) = 2.34$, $p = .02$, Cohen's $d = 0.30$, respectively. The two control conditions did not differ from one another, $t(406) = 1.44$, $p = .15$, Cohen's $d = 0.16$ (see Figure 2 displaying means for each condition).

Although the two-way interaction was not significant ($p = .75$), it remained informative for us to replicate the comparison between atheists and theists as we did in the Pilot test. Pairwise comparisons indicated a marginally significant amplified optimistic bias in theists compared with atheists for both the nonprosperity message condition ($M_{\text{theists}} = 0.27$; $M_{\text{atheists}} = 0.03$; $t(406) = 1.87$, $p = .06$, Cohen's $d = 0.19$) and no-message control condition ($M_{\text{theists}} = 0.41$; $M_{\text{atheists}} = 0.14$; $t(406) = 2.28$, $p = .02$, Cohen's $d = 0.22$). More important, replicating the Pilot test, the heightened optimistic bias was no different between atheists and theists ($M_{\text{theists}} = 0.56$; $M_{\text{atheists}} = 0.42$, $t(406) = 1.04$, $p = .30$, Cohen's $d = 0.09$), suggesting that atheists were equally biased as theists in their reported optimism, but only after listening to the (secularized) prosperity gospel message.

High-arousal positive affect (H1b). Next, we looked at the effect of condition and belief on high-arousal positive affect. First, we found an effect of belief, in which across conditions theists reported greater levels of high-arousal positive affect ($M = 2.53$, $SD = 1.08$) compared with atheists ($M = 2.22$, $SD = 1.24$), $F(1, 406) = 8.51$, $p = .004$, $\eta^2 = 0.02$. More important, in line with H1b, there was also an effect of condition, $F(2, 406) = 6.08$, $p = .002$, $\eta^2 = 0.03$, such that participants reported more high-arousal positive affect in response to the prosperity message ($M = 2.64$, $SD = 1.09$) compared with both the nonprosperity message ($M = 2.23$, $SD = 1.07$) and no-message control ($M = 2.24$, $SD = 1.06$), $t(406) = 3.07$, $p = .002$, Cohen's $d = 0.38$, and $t(406) = 3.07$, $p =$

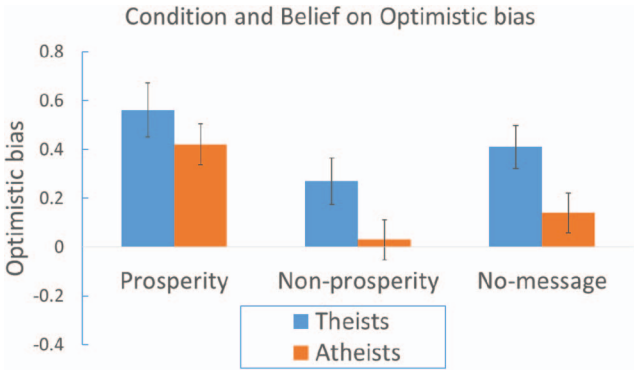

Figure 2. Theist participants in the two control conditions—nonprosperity message and no-message controls—showed a larger optimistic bias relative to atheists, but still less overall compared with participants in the prosperity message condition. Error bars represent the *SEM*. See the online article for the color version of this figure.

.002, Cohen's $d = 0.37$, respectively. There was no difference between the two control conditions, $t(406) = 0.10$, $p = .92$. The interaction between condition and belief was not significant, $F(2, 406) = 0.55$, $p = .58$, $\eta^2 = 0.003$. As expected, high-arousal positive affect had a strong association with optimistic bias, overall, $r(412) = .41$, $p < .0001$. In addition, the effect of condition on optimistic bias held while controlling for high-arousal positive affect, $F(2, 406) = 3.54$, $p = .03$, $\eta^2 = 0.02$, indicating that findings are not exclusively a result of general positive affect and that the two constructs are uniquely predicted by the experience of the prosperity message.

In summary, we find evidence that the religious content of the prosperity message does not matter. Theists and atheists who listened to the prosperity message showed no difference in reported optimism (H1a) or high-arousal positive affect (H1b). Specific to positive affect, we found that the prosperity gospel resulted in a boost of high-arousal positive affect, even for the group of atheists. This supports the idea that the prosperity gospel's impact may be less about appealing to a person's beliefs and more about making them feel good in the moment.

Discussion

In the above experiments we found preliminary evidence suggesting that exposure to prosperity gospel messages causes heightened optimistic bias (H1a in Experiments 1 and 2) and high-arousal positive affect (H1b in Experiment 2). Furthermore, we find suggestion that the prosperity gospel also makes people more financially risky (H3 in Experiment 1). We also find that the inflated optimistic bias occurs despite less message agreement when compared with a nonprosperity control message (H2 in Experiments 1). Moreover, theists demonstrate the same positivity bias even when the religious meaning is removed in a secularly framed message (Pilot and Experiment 2). And finally, we find that atheists look no different than theists in their inflated optimistic bias (Experiment 2).

Together, the current findings imply that the prosperity gospel's growing success as a religious belief system might be attributed to its arousing, positive experiences—not to its theological teachings. Indeed, the finding that the prosperity gospel seems to generate a positivity bias even when people agree with it less, is evidence that the prosperity experience might not be about consideration of its teachings, but more about quick, in-the-moment emotional and motivational feel-good states. This interpretation aligns with longstanding research on the affect heuristic (e.g., Slovic, Finucane, Peters, & MacGregor, 2007): Quick emotional experiences are capable of influencing judgments and behaviors outside deliberative conscious awareness (Zajonc, 1980). In the case of the prosperity gospel, it could be that a specific quality of "goodness" arises when exposed to a prosperity message, creating a positive state, which minimizes risk-based attributions.

An important implication worth noting is how the current findings lie opposite to the prevailing claim that religion improves self-control (e.g., McCullough & Willoughby, 2009). Heightened willingness to take risks in a positively aroused state is indicative of a *lack* of self-control. This mixed evidence indicates that the religion self-control link is more complicated than initially thought (for relevant discussions, see Good, Inzlicht, & Larson, 2015; Hobson & Inzlicht, 2016; Laurin, Kay, & Fitzsimons, 2012).

Limitations and Future Directions

Our work is not without limitations. Though we found an effect of the prosperity gospel on both real and hypothetical financial risk-taking, we failed to find heightened optimistic bias explained this effect to offer evidence of process in the case of real financial risk-taking. The failed mediation analysis for real financial risk-taking suggests there might be an alternative underlying psychological mechanism driving the prosperity gospel's effect on risk-taking, leaving the question of *why* the prosperity gospel generates financial risk-taking.

That said, the null effect in the current research could be related to a methodological issue - how we chose to assess optimistic bias. There are multiple ways to measure this construct, all of which will determine the apparent extent or presence of optimistic bias (Fife-Schaw & Barnett, 2004). The current research relied on the *direct comparison* approach, where participants indicated on a single rating scale the likelihood of experiencing positive wealth-related outcomes compared with others. The downside to this approach is that any slight changes in reported bias as a function of a manipulation (as in the present research) cannot be reliably inferred to reflect changes to the representation of the "self" or "other" (Fife-Schaw & Barnett, 2004). This could explain the weak association we observed between risk-taking and optimistic bias and the failed mediation effect. Future research would benefit from different measures of optimistic bias, including the *indirect comparison* approach (Heine & Lehman, 1995), in addition to assessing dispositional optimism, a trait measure that is prone to experimental manipulations and that has been shown to be unrelated to certain measures of optimistic bias (Radcliffe & Klein, 2002). Moreover, the prosperity gospel's influence may be an extension of more fundamental psychological tendencies, for example considering alternative outcome predictions (Markman & McMullen, 2003), which has been shown to be related to optimism (Sanna, 1996, 1998). Finally, whether the same effects can be observed in other domains of prosperity, such as health, remains an open question.

Conclusion

Taken together, the current article offers novel empirical evidence of the psychological effects of the prosperity gospel. Broadly supporting our hypotheses, we find prosperity gospel messages heighten optimistic bias and risky financial behaviors and that it is plausible that these mood boosting effects, rather than religious content, are responsible for their influence. Ironically, its success as a growing religious movement might be less about feeling God, and more about feeling good.

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