

# EFFECTS OF RELIGIOUS MUSIC ON MORAL BEHAVIOR

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## INTRODUCTION

- Previous studies suggest that religious reminders and contexts enhance the saliency of group-specific norms and increase **prosocial behaviour** (Shariff et al. 2016).
- However, the effects of religious situational factors on **dishonest behaviour** are less well documented and the underlying perceptual-behavioural mechanisms through which religious cues affect decision-making are still not fully understood.
- Moving beyond both the priming carrying semantic associations with moral norms and the anthropomorphic depictions triggering reputational concerns, we tested how **an arbitrary subtle sensory cue associated with religion**, that does not bear any inherent meaning by itself, affects moral behaviour.

## METHODS

### Experiment I

#### Participants

- general Hindu population in Mauritius, student populations in Czech Republic and North Carolina ( $n = 254$ )

#### Independent variable

- instrumental music with no lyrics, 2 min duration in headphones, similar in sound and tempo
  - religious music** (site-specific drums and flute sound played at Thaipusam Kavadi; Bach's *Ave Maria*; Bach's *BWV 147*)
  - secular music** (site-specific Bollywood song; Tchaikovsky's *Romance for piano in F Minor*; Bach's *BWV 140*)
  - white noise** (control)

#### Dependent variable

- a **chance to dishonestly report** on solved mathematical equations increasing monetary reward (adapted from Mazar et al. 2008)

### Experiment II

#### Participants

- student populations in North Carolina, Czech Republic, and Japan ( $n = 456$ )

#### Independent variable

- whole task duration vs 2 min prior to task
  - religious music** (Bach's *Ave Maria*; Japan: gaga music)
  - secular music** (Bach's *Romance for piano*; Japan: koto music)
  - white noise**
  - no sound** (control)

#### Dependent variable

- playing a **game where self-reported performance dictated payment** (the Dots Game adapted from Mazar et al. 2008)
- 200 trials vs 20

## DISCUSSION

- Significant **Condition\*Religiosity** interaction across all sites, with religious participants being more influenced by religious stimuli than non-religious participants, suggests that religious music can function as a subtle moral cue, however, only **for those who previously formed this moral association** via cultural socialization and ritual participation.

## REFERENCES

- Shariff, A. F., Willard, A. K., Andersen, T., and Norenzayan, A. (2016). Religious priming: a meta-analysis with a focus on prosociality. *Personal. Soc. Psychol. Rev.* 20, 27–48.  
Mazar, N., Amir, O., and Ariely, D. (2008). The dishonesty of honest people: a theory of self-concept maintenance. *J. Mark. Res.* 45, 633–644.



### Experiment I - USA, Czech Republic, Mauritius

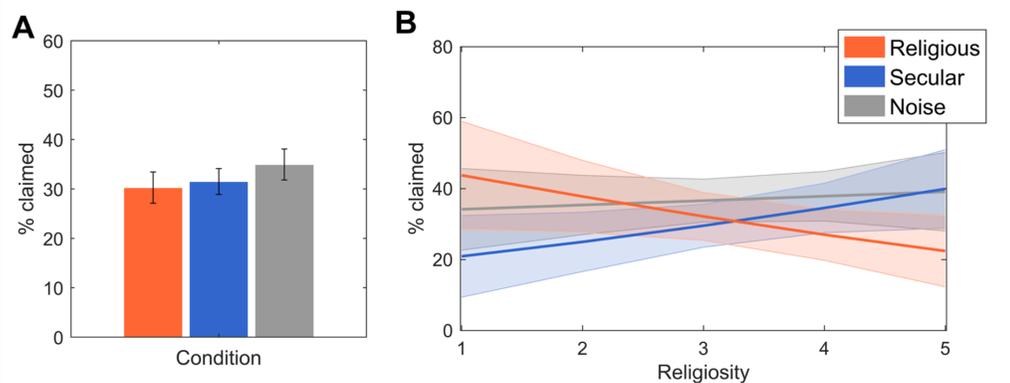
Lang, M., Mitkidis, P., Kundt, R., Nichols, A., Krajičková, L., & Xygalatas, D. (2016). Music As a Sacred Cue? Effects of Religious Music on Moral Behavior. *Frontiers in Psychology* 7(814), 1-13.

### Experiment II - USA, Czech Republic, Japan

Nichols, A., Lang, M., Kavanagh, C., Kundt, R., Ariely, D., & Mitkidis, P. (Forthcoming). Replicating the Effects of Auditory Religious Cues on Dishonest Behavior.

## RESULTS

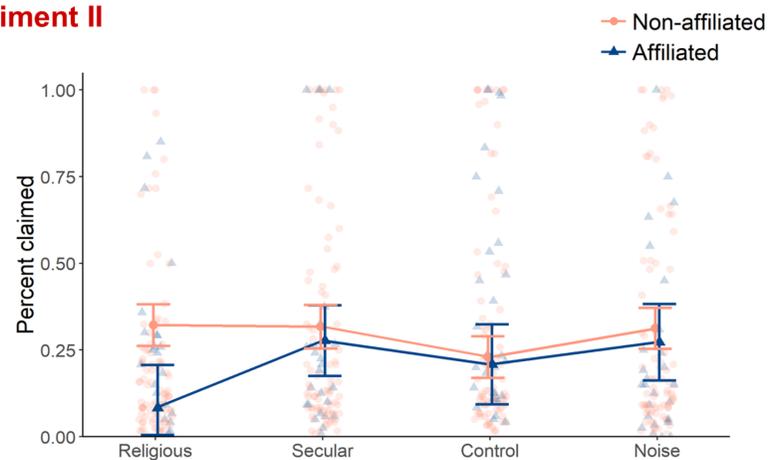
### Experiment I



(A) The effects of different stimuli on the percent of matrices that were claimed as correctly solved above the expected levels with  $\pm$ SEM. While controlling for the effects of site, there were no significant differences between conditions.

(B) Predicted values with 95% confidence intervals for the Condition\*Religiosity interaction. The significantly different slopes suggest that religious participants cheated less upon being exposed to religious music.

### Experiment II



Estimated values with 95% CI for the interaction between condition and religious affiliation layered over a scatter plot of raw data. The religious prime was effective only in participants affiliated to religious organization where our stimuli came from.

