

# Traditional Religious Beliefs in Contemporary Africa

**Nathan Nunn**  
*University of British Columbia*

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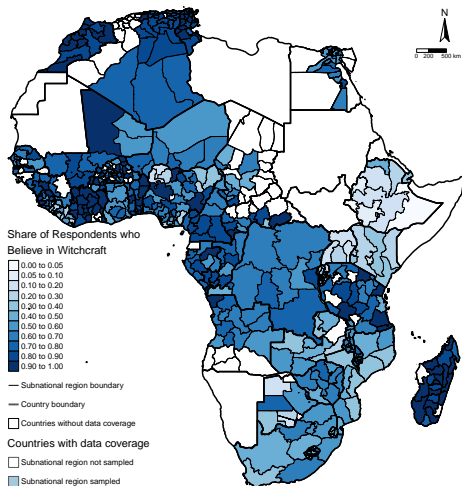
# A more-open perspective on religion

- In recent years, there has been a significant increase in economists' interest of religion.
  - E.g., Iannaccone (1998), Barro and McCleary (2003, 2019), Becker and Woessmann (2009), Woodberry (2012), Botticini and Eckstein (2012), Norenzayan (2016), Rubin (2017), Platteau (2017), Johnson and Koyama (2017, 2019), Valencia Caicedo (2019), Bryan et al. (2021).
- However, the literature that has evolved is very WEIRD-biased.
  - Focus disproportionately on Abrahamic Religions (e.g., Christianity, Judaism, Islam).
- In fact, other spiritual beliefs are often perceived as not being a 'religion.'
  - Referred to as superstition, witchcraft, sorcery, magic, etc.

# Africa in a state of cultural transition

- Africa has experienced rapid cultural change in the last century: e.g., the near-universal adoption of Christianity (and previously Islam).
  - 97% of the continent adheres to one of the two religions.
- Traditional beliefs persist, remain central to African identity, and are important in multiple domains.
  - Butinda et al. (2024) for economic behavior.
  - Lowes et al. (2026) for governance.

# Traditional beliefs remain widespread



Notes: Fraction of respondents who report believing in witchcraft. The data are from the Sub-Saharan Africa Religion Survey (2008 and 2009), the World's Muslims Survey (2011 and 2012), and Gallup (2009 and 2011, waves 4 and 6).

# What are the consequences of holding traditional beliefs in contemporary Africa?

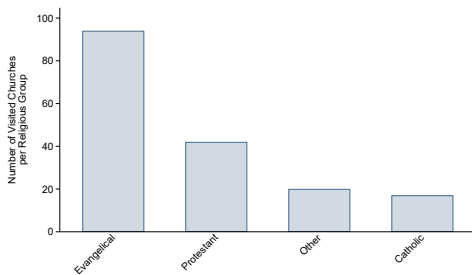
## Overview of Lowes et al. (2025)

- 1 Conduct a census of churches in a city in northern DRC.
  - Traditional customs, beliefs, and practices are commonly mentioned in sermons.
  - The sentiment is very negative.
- 2 In experimental settings, holding traditional religious beliefs causes one to be the target of:
  - Negative perceptions.
  - Antisocial norms.
  - Antisocial behavior.
- 3 The effects:
  - Are present (on average) across sub-Saharan Africa.
  - Are (at least in part) the result of historical exposure to Christianity.

# Church census and sermon data

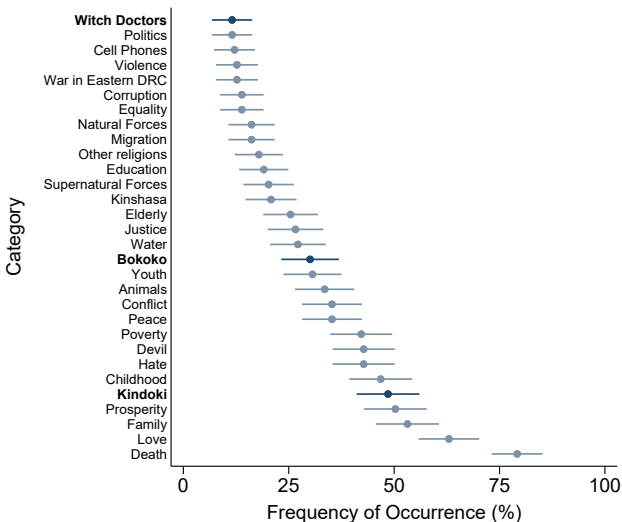
- Conducted a census of churches in a city in the northern Dem. Rep. of Congo.
- Recorded audio of Sunday sermons for 160 of the 200 churches (randomly chosen).
  - Sample represents an estimated 90% of all congregants in the city.
- Enumerators recorded sermon content using a pre-specified list of topics
  - Noted whether a topic is mentioned and its sentiment.
- Transcribed and translated sermons that mentioned:
  - 1 ancestors, customs (*bokoko*)
  - 2 witchcraft (*kindoki*)
  - 3 witchdoctors

# The setting





# Topics mentioned during sermons: Enumerator coded



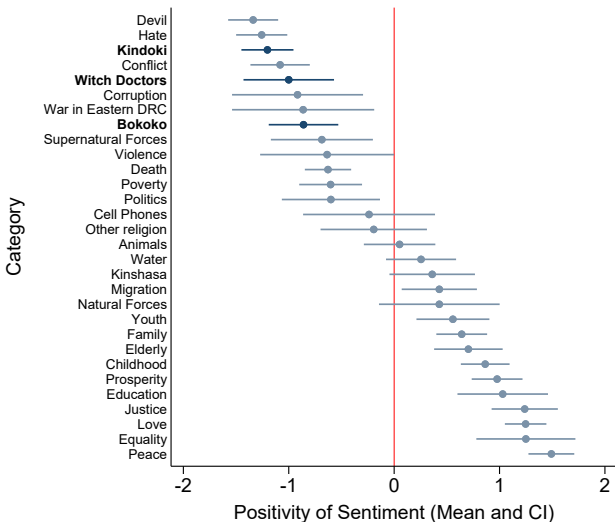
Notes: The figure presents whether a topic is mentioned in a sermon based on enumerator topic indexing for the full sample of sermons (n=171). We restrict the topics to those that are mentioned at least 15 times.

# Examples of mentions during sermons

*“God does something for me, God does something like you are like that when you come to church it is to challenge Satan, but the one who prays to God is not less. **The one who comes with the magical charm is Satan. Those who have bokoko challenge God. Those who kneel to pray to God and those who invoke the bokoko; there is a difference between a believer and a child of the Devil.**” [Protestant church, DRC; coded as very negative]*

*“This means that for God to perform a miracle for you, **you must first abandon your customs and become a Christian; then custom will have no effect on you, and in that way God can change much in your life. We said last week that for a person to begin to see change in his or her life, that person must come out of blindness.**” [Evangelical church, DRC; coded as very negative]*

# Topic sentiment as recorded by enumerator



Notes: The figure presents the sentiment with which a topic is mentioned in a sermon based on enumerator coding for those topics that are mentioned at least 15 times. The coding varies from very negative (-2) to very positive (2).

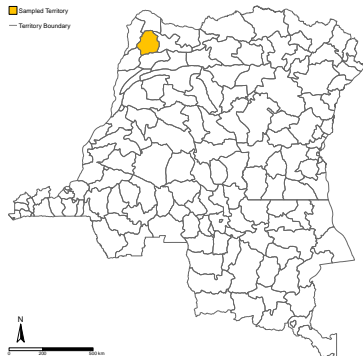
# How are traditional believers perceived and treated?

## Experimental evidence

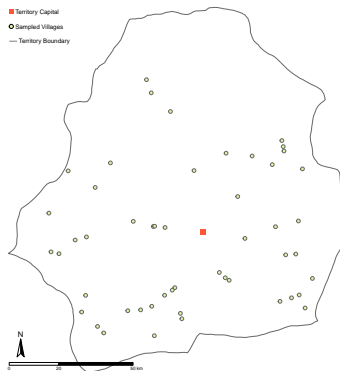
- Individuals participate in experimental tasks that measure prosocial behavior, norms, and perceptions towards another player.
- The activities are anonymous, but we provide some information about the other player, including their belief in **bokoko**.
- Since players are randomly matched, the characteristics of the other player are randomly assigned.
- **How are those who hold strong traditional beliefs treated?**

# Sample for the experiments

## Region of the DRC



One city:  $n = 520$   
Fifty villages:  $n = 600$



# Information given about the other player

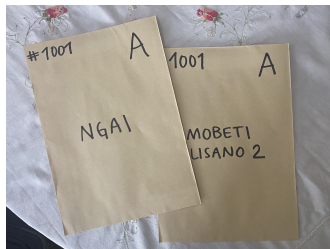
Participants receive information about the other player:

1. **Age group:** old or young
2. **Sex:** man or woman
3. **Education:** didn't complete primary, completed primary, or completed secondary
4. **Ethnic group:** same or different
5. **Belief in Christian God:** strong or very strong in city; all possible values in villages
6. **Traditional Beliefs:** weak, neither weak nor strong, strong, or very strong
7. **Origin:** if grew up in the city; if grew up in a rural area

# Conveying information about the other player

- “You will play with someone chosen randomly from the population of [area]. We cannot tell you exactly who you are playing with. However, we can tell you some information about the other player.”
- “We can tell you six things about the other player. This is their age group, gender, the level of schooling they have completed, their ethnic group, some of their beliefs, and whether they grew up in [city name/rural area].”
- “. . . Now let me tell you about the other player.”
- **An example:** “The other player is an [old] [woman] [who completed primary school,] [is from your ethnic group,] [has a very strong belief in the Christian God,] [a weak belief in bokoko,] and [did not grow up in [city name]].”

# Dictator game (DG)



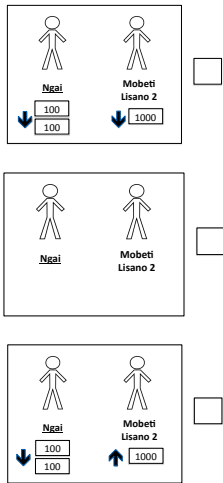
- The participant is given CF 1,000 (10 × CF 100 bills).
- Allocates money to player 2 by putting bills in an envelope, sealing it, and placing in a bag.
- Game is played twice, stratified by player 2's supernatural beliefs:
  - 1 'weak or very weak' or 'neither believe or disbelieve'
  - 2 'strong' or 'very strong'

# Choose-your-dictator game

- Participant is given information about two other players (person A and B).
- Chooses one of the two to be the player 1 (the dictator) in a dictator game.
  - The participant is the player 2 (the receiver) in the game.
- Game is played twice, stratified by the supernatural beliefs of person A and person B.

# Joy-of-destruction (JOD) game

- The participant (player 1) and player 2 are each given CF 2,000.
- The participant chooses one of the following actions (in private):
  1. Pay CF 200 to decrease player 2's payoff by CF 1,000
  2. Do nothing
  3. Pay CF 200 to increase player 2's payoff by CF 1,000
- Game is played twice, stratified by player 2's supernatural beliefs.



# Effects on behavior in experiments

## Dictator game; choose-your-dictator game; Joy of destruction game

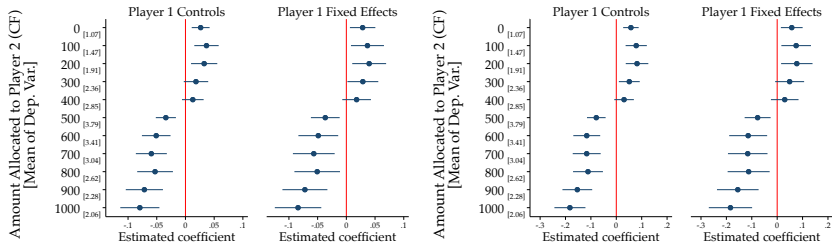
	OLS, Dep. Var.:											
	DG: Amount Sent to Other Player (in CF)				CYD: Chose Player as Dictator				JOD: Choice in JOD			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<b>Player 2's</b>												
<b>Traditional Beliefs:</b>												
Integer Measure, 1-4	-6.675 [3.746]* (2.872)*	-8.441 [2.802]*** (3.964)***			-0.140 [0.006]*** (0.009)***	-0.148 [0.007]*** (0.010)***			-0.043 [0.013]*** (0.012)***	-0.043 [0.012]*** (0.018)***		
Strong or Very Strong			-19.613 [8.342]** (6.166)**	-19.749 [6.098]*** (8.626)***			-0.354 [0.014]*** (0.021)***	-0.354 [0.016]*** (0.024)***			-0.096 [0.029]*** (0.026)***	-0.093 [0.026]*** (0.037)***
<b>Player 1's</b>												
<b>Traditional Beliefs:</b>												
Integer Measure, 1-4	-9.653 [3.701]*** (4.487)***				-0.002 [0.006] (0.002)				-0.027 [0.013]** (0.014)**			
Strong or Very Strong			-22.363 [9.597]** (11.723)**				-0.002 [0.016] (0.004)					-0.048 [0.033] (0.035)
Player 1 FE	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y
Sample FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	2,240	2,240	2,240	2,240	4,480	4,480	4,480	4,480	2,212	2,212	2,212	2,212
Respondents	1,120	1,120	1,120	1,120	1,120	1,120	1,120	1,120	1,111	1,111	1,111	1,111
Mean Dep. Var.	452.2	452.2	452.2	452.2	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1
SD Dep. Var.	199.9	199.9	199.9	199.9	0.5	0.5	0.5	0.5	0.7	0.7	0.7	0.7

Notes: The table reports OLS estimates of equation 1 and 2. All columns include fixed effects for player 2 characteristics: gender, educational attainment, grew up in a rural area, strength of belief in the Christian God, and same tribe as player 1. Odd-numbered columns include fixed effects for the equivalent player 1 characteristics. Even-numbered columns include player 1 fixed effects. *Amount Sent to Other Player* is the amount player 1 sends to player 2 in an anonymous dictator game (in CF). *Chose Player as Dictator* is an indicator variable equal to 1 if this player was selected. *Choice in JOD* takes the value of -1 if player 1 chooses to decrease the endowment of player 2, 0 if player 1 chooses to do nothing, and 1 if player 1 chooses to increase the endowment of player 2. *Traditional Beliefs* is a variable from 1 to 4, where (1) is weak traditional beliefs, (2) neither weak nor strong traditional beliefs, (3) strong traditional beliefs, and (4) very strong traditional beliefs. Columns 1, 2, 5, 6, 9, and 10 present the results with traditional beliefs as a 1 to 4 variable. Columns 3, 4, 7, 8, 11, and 12 present the results with an indicator variable that equals 1 for strong or very strong traditional beliefs, where the omitted category is weak traditional beliefs or neither weak nor strong traditional beliefs. Robust standard errors are reported in []. Standard errors clustered at the individual level in (). \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

# Measuring social norms

- For every possible action in a game, participants are asked to think about how socially appropriate the action is.
  - Potential choices: (1) very socially inappropriate; (2) socially inappropriate; (3) socially appropriate; and (4) very socially appropriate.
- To elicit norms, we ask participants what they believe to be **the most common choice of all other participants**.
  - **Others are also choosing what they believe to be the most common** choice.
  - So, all participants are trying to identify what they perceive as the social norm.
- For each game, participants receive 5,000CF (urban) or 3,000CF (rural) if, for all decisions, their choice is correct (i.e., the most common response).

# Effects on norms: Using Krupka-Weber for the DG

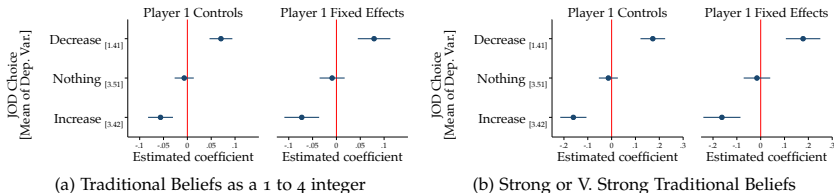


(a) Traditional Beliefs as a 1 to 4 integer

(b) Strong or V. Strong Traditional Beliefs

Notes: The figure reports OLS estimates of equation 3. The figure presents the effect of player 2's traditional beliefs on how appropriate each allocation choice is in the DG for both samples. The eleven choices in the DG correspond to the amounts between CF 0 and 1,000 that can be sent to the other player. 'Appropriate' is a 1 to 4 variable, where (1) is very socially inappropriate, (2) is somewhat socially inappropriate, (3) is very socially appropriate, and (4) is very socially appropriate. The mean value of appropriate for each choice is denoted in brackets. *Traditional Beliefs* is a variable from 1 to 4, where (1) is weak traditional beliefs, (2) neither weak nor strong traditional beliefs, (3) strong traditional beliefs, (4) very strong traditional beliefs. The subfigure in column (a) presents the results with traditional beliefs as a 1 to 4 variable; the subfigure in column (b) presents the results with traditional beliefs as an indicator variable equal to 1 for strong or very strong traditional beliefs. 'Player 1 Controls' denotes the specification with fixed effects for player 1 characteristics; 'Player 1 Fixed Effects' denotes the specification with player 1 fixed effects. Standard errors are clustered at the individual level.

# Effects on norms: Using Krupka-Weber for the JOD



Notes: The figure reports OLS estimates of equation 3. The figure presents the effect of player  $z$ 's traditional beliefs on how appropriate each choice is in the JOD for both samples. The three choices in the JOD are to decrease, do nothing, or increase the endowment of the other player. 'Appropriate' is a 1 to 4 variable, where (1) is very socially inappropriate, (2) is somewhat socially inappropriate, (3) is somewhat socially appropriate, and (4) is very socially appropriate. The mean value of appropriate for each choice is denoted in brackets. *Traditional Beliefs* is a variable from 1 to 4, where (1) is weak traditional beliefs, (2) neither weak nor strong traditional beliefs, (3) strong traditional beliefs, (4) very strong traditional beliefs. The subfigure in column (a) presents the results with traditional beliefs as a 1 to 4 variable; the subfigure in column (b) presents the results with traditional beliefs as an indicator variable equal to 1 for strong or very strong traditional beliefs. 'Player 1 Controls' denotes the specification with fixed effects for player 1 characteristics; 'Player 1 Fixed Effects' denotes the specification with player 1 fixed effects. Standard errors are clustered at the individual level.

# Measuring perceptions: Conjunction fallacy questions

- **Socially-included:** Marie lives in [City] and is 30 years old. Others view Marie very favorably. Those who know her are always happy to spend time with her. Is it more probable that Marie is:
  - (1) a farmer
  - (2) a farmer who is a strong believer in bokoko
  - (3) a farmer who is a strong believer in the Christian God
- **Socially-excluded:** Ruth lives in a neighborhood of [City] where most of the families are good friends with each other. Her neighbor's daughter is having a bride wealth ceremony. The neighbor invites almost everyone who lives nearby except for Ruth. Is it more probable that Ruth is:
  - (1) a cook
  - (2) a cook who is a strong believer in bokoko
  - (3) a cook who is a strong believer in the Christian God

# Effects on perceptions and stereotypes

	Potential Responses:				Potential Responses:		
	Baseline Characteristic Only	Baseline & Traditional	Baseline & Christian		Baseline Characteristic Only	Baseline & Traditional	Baseline & Christian
<b>Character described as:</b>				<b>Character described as:</b>			
<b>Liking Food</b>	64.63 (47.86)	12.81 (33.45)	22.56 (41.84)				
<b>Honest</b>	12.24 (32.8)	9.75 (29.69)	78.01 (41.46)	<b>Dishonest</b>	29.45 (45.62)	58.32 (49.35)	12.24 (32.8)
<b>Benevolent</b>	5.16 (22.15)	3.06 (17.24)	91.78 (27.5)	<b>Jealous</b>	14.53 (35.28)	82.6 (37.95)	2.87 (16.71)
<b>Generous</b>	7.27 (25.98)	2.49 (15.58)	90.25 (29.69)	<b>Selfish</b>	21.8 (41.33)	68.26 (46.59)	9.94 (29.95)
<b>Even Tempered</b>	31.17 (46.36)	6.12 (23.99)	62.72 (48.4)	<b>Vindictive</b>	10.33 (30.46)	87.38 (33.24)	2.29 (14.99)
<b>Socially Included</b>	29.64 (45.71)	1.53 (12.28)	68.83 (46.36)	<b>Socially Excluded</b>	28.68 (45.27)	61.76 (48.64)	9.56 (29.43)
<b>Rich</b>	51.05 (50.04)	9.56 (29.43)	39.39 (48.91)	<b>Poor</b>	43.98 (49.68)	5.16 (22.15)	50.86 (50.04)
Observations:	523	523	523		523	523	523

Notes: For each scenario, we report the percentage of the sample that did not make the conjunction fallacy (i.e. *Baseline Characteristic*), made the conjunction fallacy with traditional beliefs (*Baseline & Traditional*), and made the conjunction fallacy with Christian beliefs (*Baseline & Christian*). Averages are reported with the standard deviation in parentheses.

# What are the origins of this phenomenon?

- Historical accounts suggest the origins might lie with the introduction of Christianity.
  - Universal god beliefs do not allow for other religious beliefs.
  - Can lead to the denigration of other belief systems.
- Find that our experimental effects are strongest in places with more historical exposure to Christianity.
  - Analysis focuses on the historical presence of colonial mission stations in rural villages.

# Missions and perceptions of traditional religion (across Africa)

- Look at data from across Africa asking about religious beliefs.
- Find that, on average, places with more Christian missions have more negative perceptions of traditional religion today.
  - True regardless of whether a person practices traditional religion or not.
- People from groups with more historical missionary exposure view traditional believers more negatively.
  - Evidence is from enumerators and respondents in Afrobarometer surveys.

# Summing up: Culture at a crossroads

- Our findings suggest that many Africans are in a difficult position.
- Christianity, a universal god religion, can cast traditional beliefs in a negative light.
- Results in negative perception, antisocial norms, and antisocial behavior towards traditional believers.
- Giving up traditional beliefs is difficult since they are important and have benefits.
  - Provides a connection to the spiritual realm, including one's ancestors.
  - Helpful for personal wellbeing.
  - Important for social and political organization.