

# The Broader Political Significance of Houses of Worship: Theory and Evidence from Indonesian Mosques

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# Background

NEWS • NATIONAL

## Radical sermons widespread in government offices



First prayer: Muslims perform tarawih (evening Ramadhan prayers) at Istiqlal Mosque in Jakarta on May 16, marking the beginning of the fasting month. (IP/Wendra Aljisyatama)

## Indonesia mosques spreading radicalism to government workers: Official



A photo taken on May 26, 2013 in Stuttgart shows muslim men praying in a mosque of the so-called Turkish-Islamic Union for Religious Affairs association DITIB. Germany's Muslims, mostly of Turkish origin, see their communities shaken up by mass arrivals of Arab refugees, but experts also see positive change while cautioning against a revival of radicalism. AFP PHOTO / DPA - DANIEL NAUPOLD --GERMANY OUT DANIEL NAUPOLD / DPA / AFP (AFP-)

- Jakarta Post's reports in 2018 on two studies of mosques in Indonesia, one by the State Intelligence Agency (BIN) and one by civil society organizations

# Background

## Bangladesh launches billion dollar 'model' mosques to counter radicals



Bangladesh has launched a billion-dollar campaign to build hundreds of "model mosques" to try to counter radical Islam in the Muslim-majority country. (Reuters)

## Radical Baptist church preaches LGBTQ hate just miles from California's Capitol



Pastor Robert Jeffries delivers the opening prayer of a Sunday morning service at First Baptist Church in Sacramento. (Shelb McManis / Los Angeles Times)

**DISCUSSION QUESTION**

**QUESTION**  
"Disorienting" says Hollywood figures killed inside mosque, LAIF.com

**ANSWER**  
News coverage on Michael Loh killing had shifted. Emphasis on his direction, research, class

**CONNECTION TO ARTS**  
After a public hearing, Senate Sponsors try to find her symbolic voice again

**NOTES**  
If testimony from the Newsweek-Chicago debate did the trick

**SEE ALSO**  
"Prouder: Why did UCLA keep Chip Kelly?" Martin Sammartino has no good answer

**NOTES**  
and more...

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## Islam, scripted: Egypt reins in Friday sermons at mosque

The Friday sermon is perhaps Egypt's most influential forum. In a bid to stifle every potential avenue of dissent, the military government is exerting control over the pulpit.

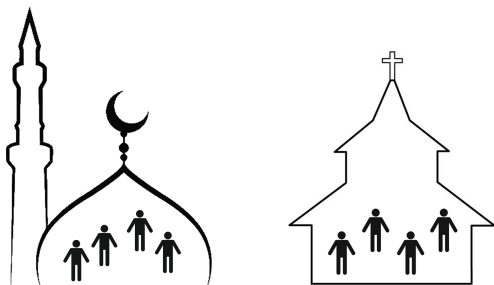


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# Questions

- Research has looked only at effects on the attendees / congregation (i.e., specific political significance)



(e.g, Brooke 2019; Brooke, Chouhoud, and Hoffman 2023; Djupe and Gilbert 2008; Lewis, MacGregor, and Putnam 2013; McDaniel 2008; Wickham 2002)

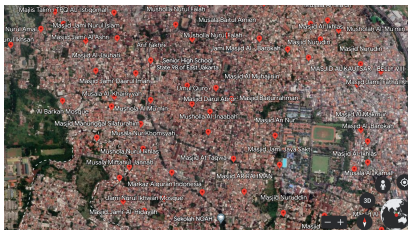


# Questions

- Research has looked only at effects on the attendees / congregation (i.e., specific political significance)
- Even though houses of worship are actually neighborhood institutions

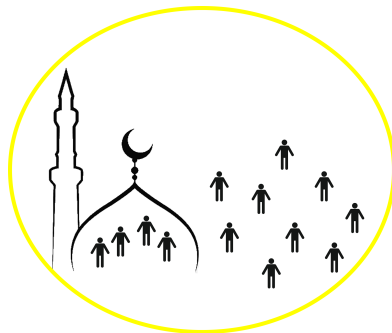


- And everywhere



# Questions

**What are the effects of houses of worship on the community's sociopolitical attitudes (broader significance)?**



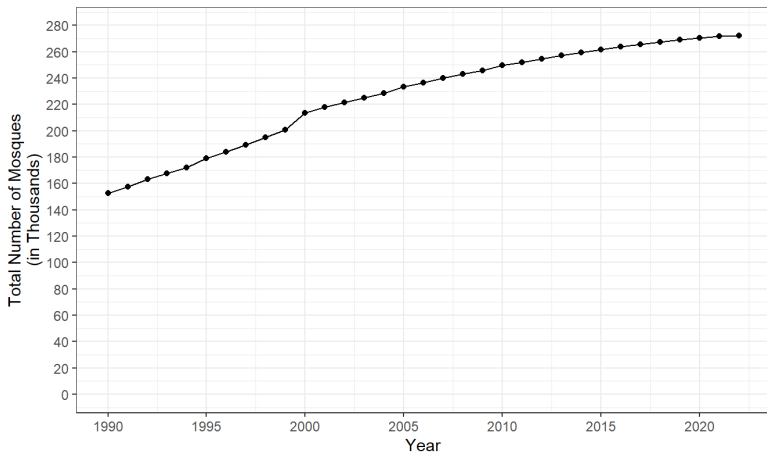
- Community influence: influence of a majority group's houses of worship on the group members' attitudes and behaviors

# Data

- Mosque Information System by the Ministry of Religious Affairs
  - 296,541 mosques (Dec 31, 2022)
  - Takmir (mosque administrator) registered their mosque
- Indonesian Family Life Survey Rounds 4 (2007) and 5 (2014)
  - Panel study, interviewing same respondents and their new household members
  - Round 4: 44,103 individuals in 13,535 households
  - Round 5: 50,148 individuals in 16,204 households
- 2010 National Census

# Data

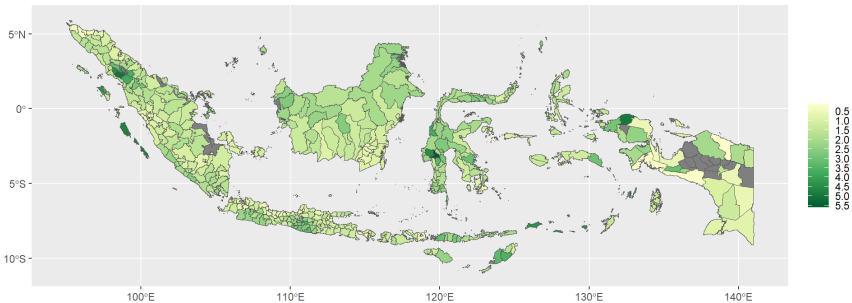
## Growth in Number of Mosques (1990 - 2022), in Thousands



Data from SIMAS, retrieved on December 31, 2022. Some mosques are missing information about year of construction and omitted from this analysis. Value in 1990 reflects total mosques whose years of construction were in or prior to 1990.

# Data

## Number of Mosques per 1,000 Muslim Residents by Kabupaten



Kabupaten (regency) is the second administrative subdivision, below province and above kecamatan.

Population data is based on the 2010 census.

Mosque data is from the SIMAS system and was retrieved on December 31, 2022.

# Methods

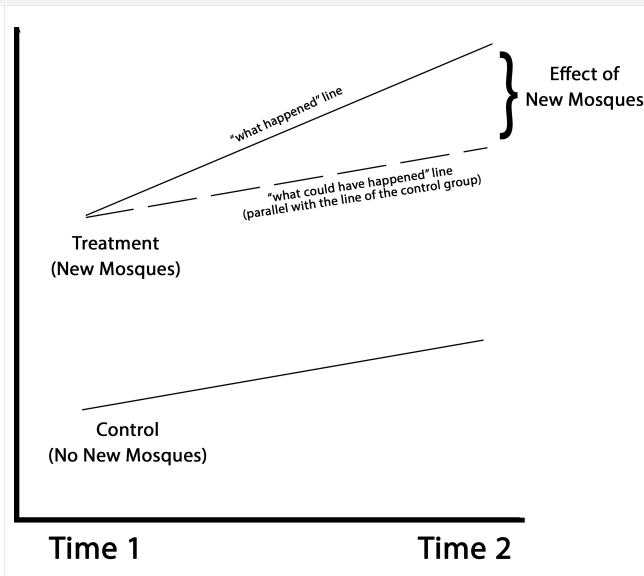
- Kecamatans (third-level administrative subdivision)
- Inclusion criteria: 16,000+ panel Muslim respondents who lived in the same Muslim-majority kecamatans between Round 4 (2007) and Round 5 (2014)

- Difference-in-differences (DID)

$$y_{it} = b_0 + b_1 T_i + b_2 D_i + b_3 (T_i \times D_i) + e_{it}$$

- $T_i = 1_{year==2014}$
- $D_i$  is treatment indicator (1 if resides in a kecamatan with at least one new mosque between 2007 and 2013)
  - 16.8% of kecamatans (182 out of 1,081) had no new mosque
  - 20.36% of respondents (3,307 out of 16,239) lived in the control kecamatans

# DID Illustration (Hypothetical)



# Outcome Variables

## Outgroup Rejection

1. Objection to non-Muslims living in the village\*
2. Objection to non-Muslims living in the neighborhood\*
3. Objection to non-Muslims living in the same house\*
4. Objection to non-Muslim worship house in the village\*
5. Objection to interfaith marriage\*

## Political Preferences

6. Preference for Religiously Similar Candidate
7. Preference for Ethnically Similar Candidate

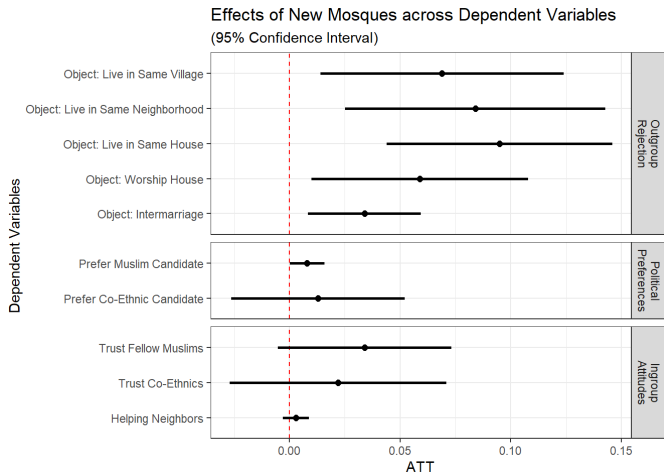
## Ingroup Attachment / Good Neighborliness

8. Trust toward fellow Muslims\*
9. Trust toward co-ethnic\*
10. Willingness to help neighbors in need\*

\*Originally 4-point scale; Main models dichotomize these variables  
Clustered standard errors on the kecamatan level



# Effects of New Mosques



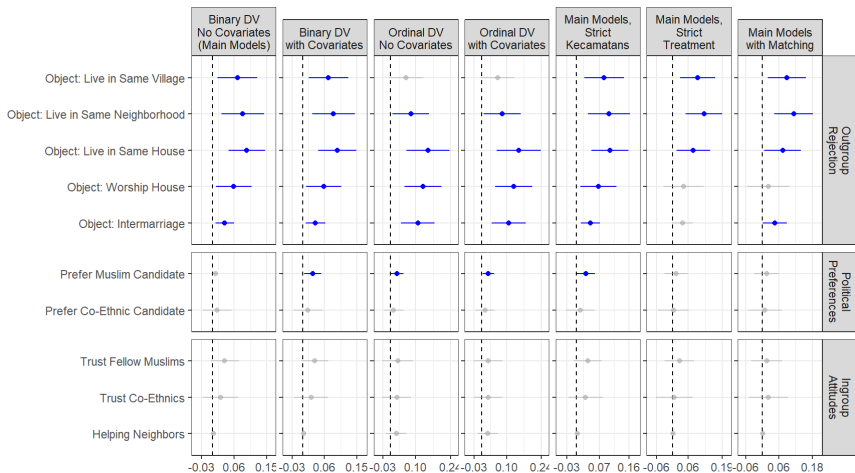
- New mosques correspond to increased outgroup rejection toward non-Muslims. No effects on other outcomes.

# Alternative Specifications

Are the results robust to modeling specifications?

1. Binary DV with covariates
2. Ordinal DV
3. Ordinal DV with covariates
4. Strict kecamatans (those with more than 10 respondents)
5. Strict treatment (exactly one new mosque)
6. Propensity matching on covariates and pre-treatment DVs

# Alternative Specifications



Alternative specifications largely resemble the main models

# Placebo Tests

Does the treatment (more mosques) drive the results?

## 1. In-space placebo

Analyze only "control" kecamatans. Randomly assign half of these kecamatans to receive new mosques.

## 2. In-time placebo

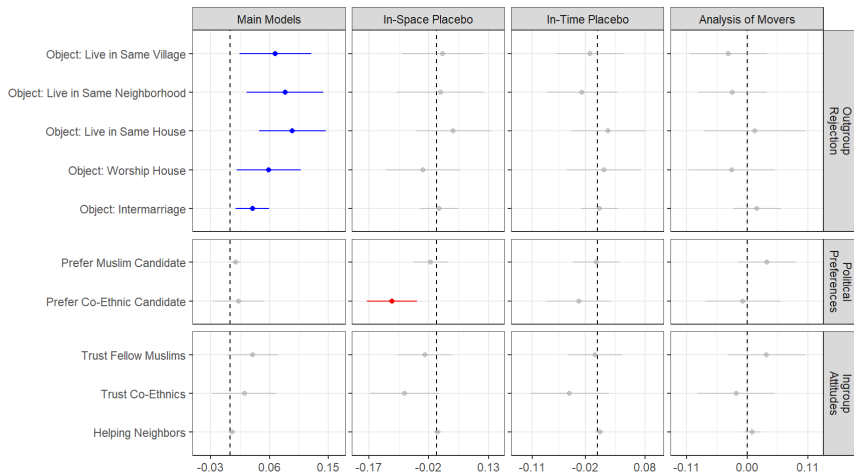
Treatment is defined as new mosques between 2000 and 2006.

## 3. Analysis of movers

Analyze only people who moved out of or into analyzed kecamatans.

All of these analyses should result in null effects.

# Placebo Tests



- Placebo models are largely null effects. There are no effects when the treatment is absent (i.e., no new mosques).

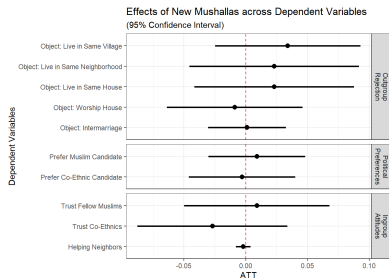
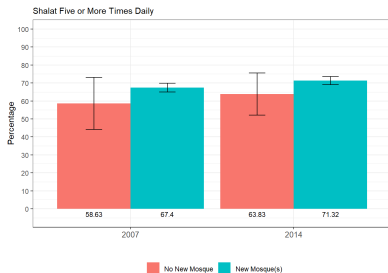
# Mechanisms

What is the mechanism?

- Confessional  
Mosques promote and cultivate piety in the community
- Sociopsychological  
Mosques promote religious identity and social networks
- Informational  
Mosques provide information both on secular and sacred matters

# Religiosity as Mechanism?

- Mosques should lead to higher shalat frequency
- Results would hold up when we replace mosques with mushallas
- **No support for both predictions**



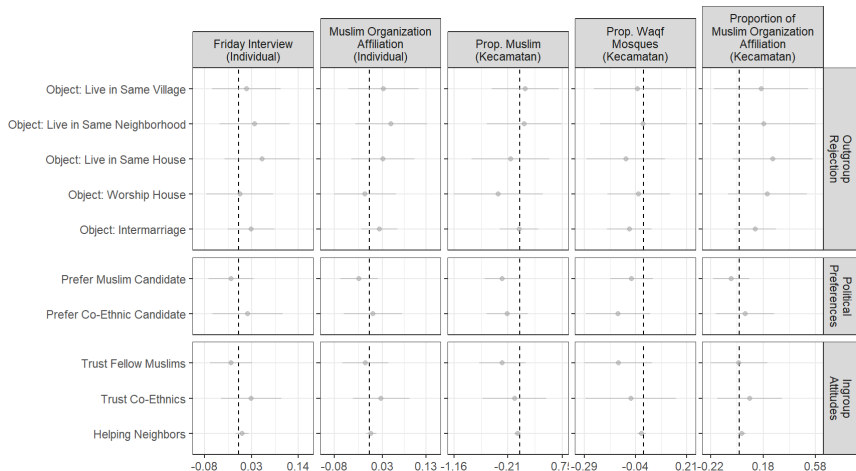
# Networks and Identity as Mechanism?

Strategy: Assess if certain identity-related variables (moderators) amplify or weaken the effects of mosques

- Individual-level: (1) Friday interview, (2) identification with a Muslim organization (NU / Muhammadiyah)
- Kecamatan-level: (1) Higher share of Muslims, (2) Higher share of waqf mosques, (3) Higher share of NU / Muhammadiyah



# Networks and Identity as Mechanism?



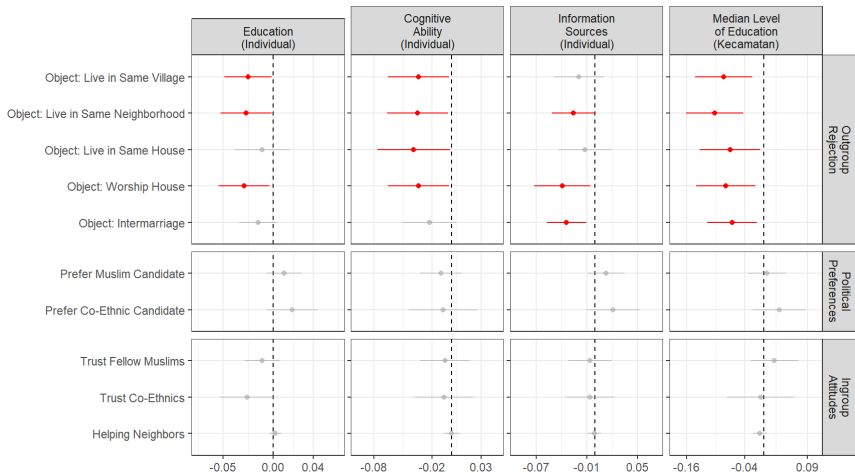
- No support for the network-identity mechanism

# Information Provision as Mechanism?

Strategy: Assess if certain information-related variables (moderators) amplify or weaken the effects of mosques

- Individual-level: (1) Education, (2) Cognitive ability, (3) Alternative information sources (newspapers, TV, internet, social media)
- Kecamatan-level: (1) Median education
- These moderators capture ability to critically evaluate information or access to alternative information sources

# Information Provision as Mechanism?



- Strong support for the mechanism. Effects of mosques on exclusionary attitudes are weaker among those who can critically evaluate information or who have alternative sources of information.

# Summary

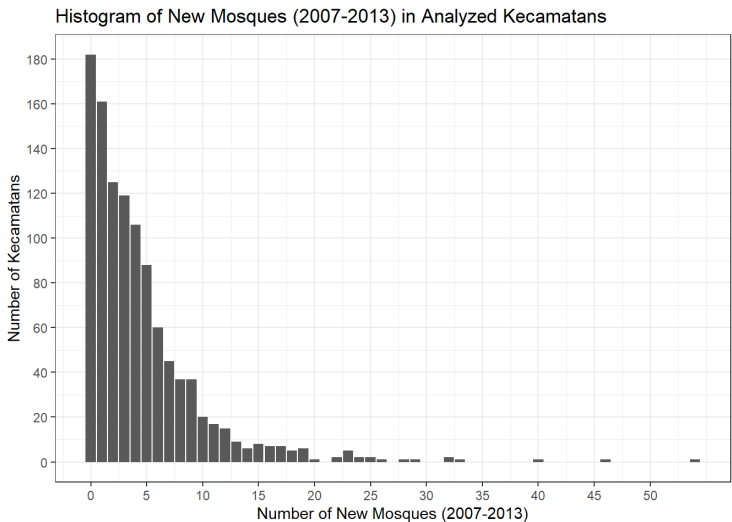
- New mosques correspond with increased exclusionary attitudes toward non-Muslims (see Jahroni and Abubakar 2019; al-Makassary 2013; al-Makassary and Gaus 2010 for discussion and examples of exclusionary messaging in Indonesian mosques).
- Effects are driven by roles of mosques as a communication and information channel in the communities
- Conditions for broader political significance:
  - Community condition: Have to be central in the community's life
  - Communication condition: Have to provide information sacred and secular
  - Openness condition: Have to operate freely

# Thank You

# Appendix

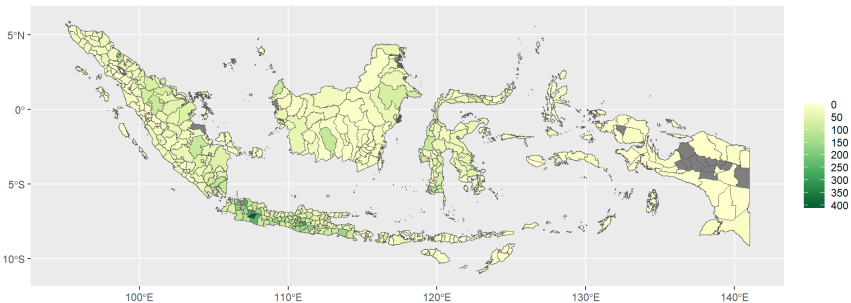
- Histogram New Mosques
- Map New Mosques
- Map Respondents
- Kecamatan Population
- Kecamatan Sample
- Kecamatan Sample by Treatment
- Household Sample
- Household Sample by Treatment
- Matching Balance
- Mushalla Number
- Mushalla Map
- Mushalla - Mosque Correlation
- Existing Mosque - New Mosque Correlation
- Parallel Trends
- Election 2014

# Histogram of New Mosques



# Distribution of New Mosques

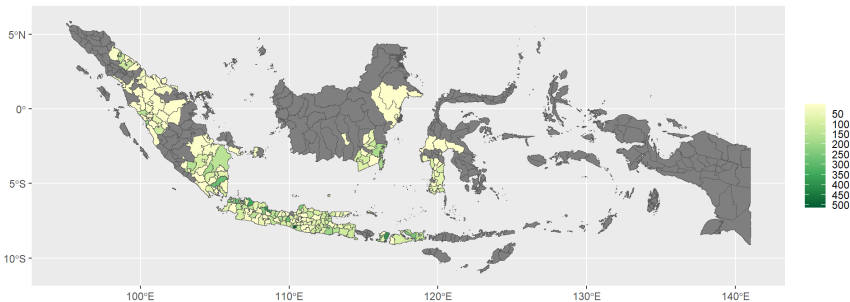
New Mosques between 2007 and 2013 across Kabupatens





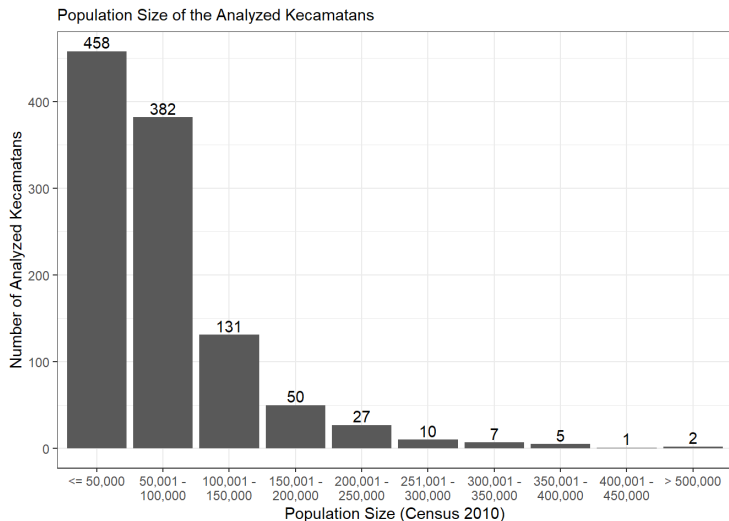
# Distribution of Respondents

Distribution of Analyzed Respondents across Kabupatens

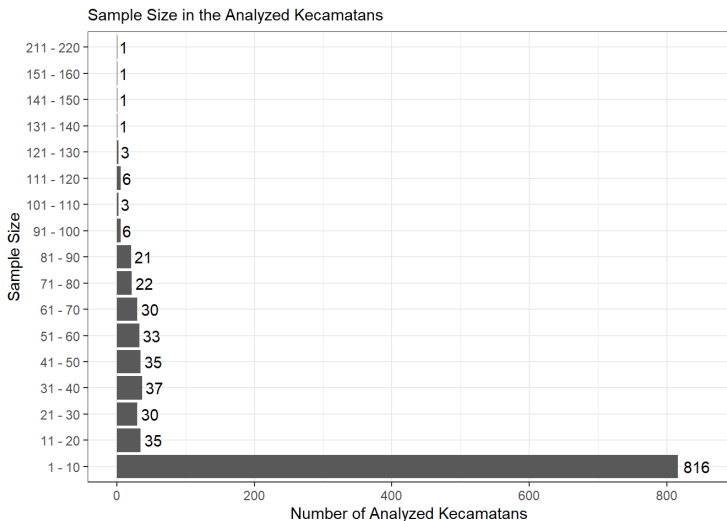


Respondents are IFLS-4 and IFLS-5 respondents who are analyzed in the paper. Mosque data is from the SIMAS system and was retrieved on December 31, 2022.

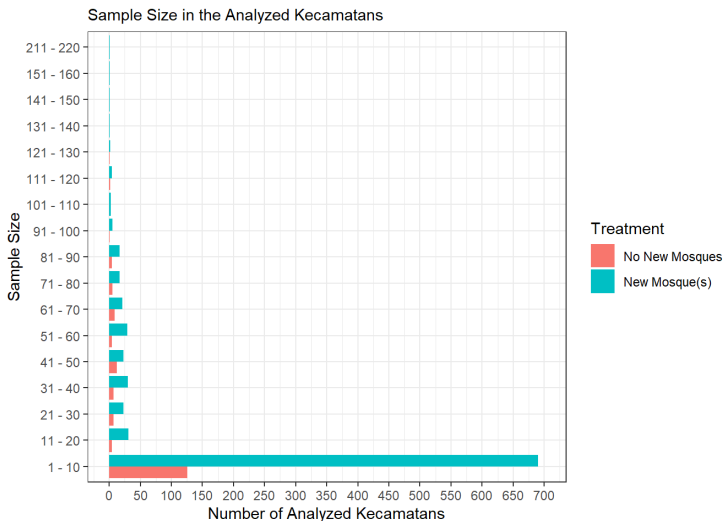
# Kecamatan: Population Size



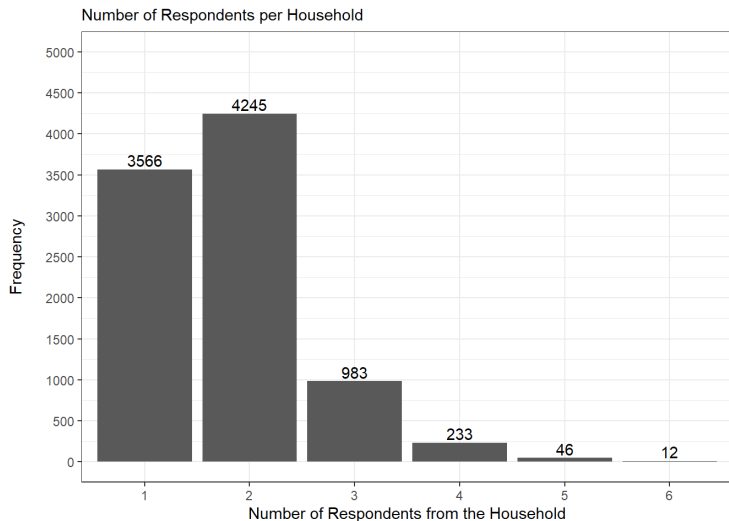
# Kecamatan: Sample Size



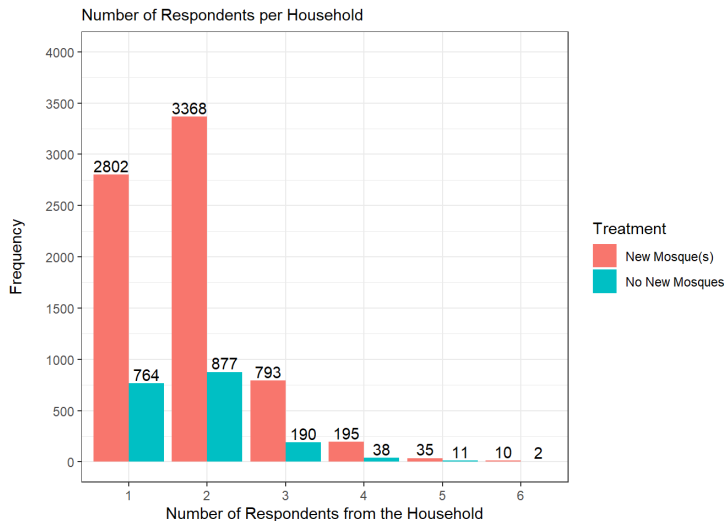
# Kecamatan: Sample Size by Treatment



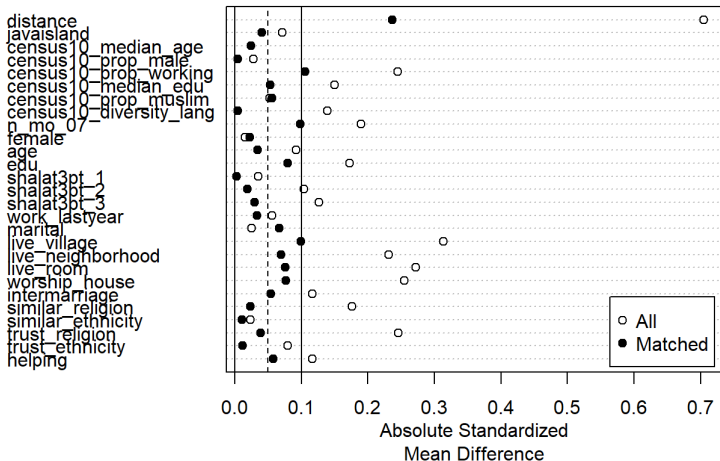
# Household: Sample Size



# Household: Sample Size by Treatment

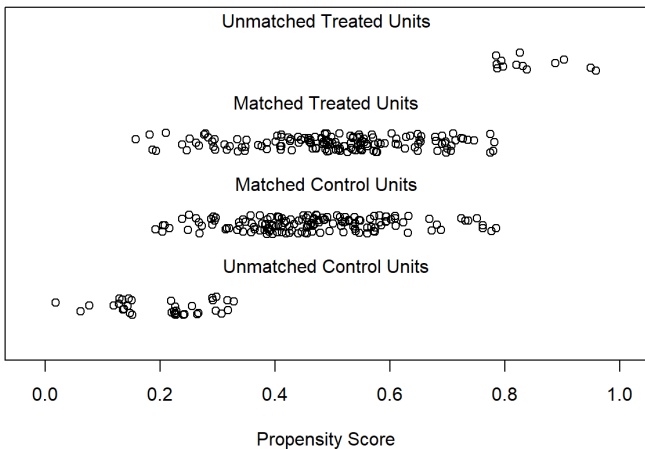


# Balance



# Balance

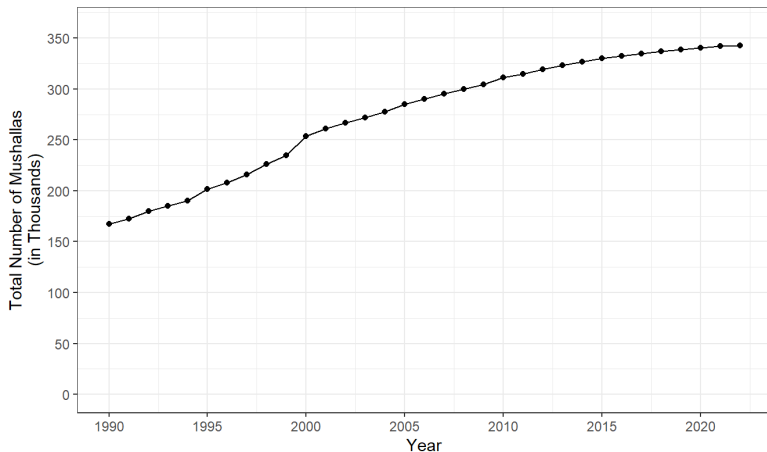
## Distribution of Propensity Scores





# Number of Mushallas Over Time

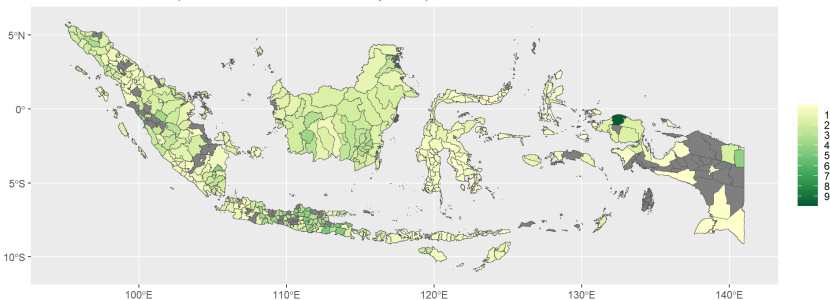
Growth in Number of Mushallas (1990 - 2022), in Thousands



Data from SIMAS, retrieved on December 31, 2022. Some mushallas are missing information about year of construction and omitted from this analysis. Value in 1990 reflects total mushallas whose years of construction were in or prior to 1990.

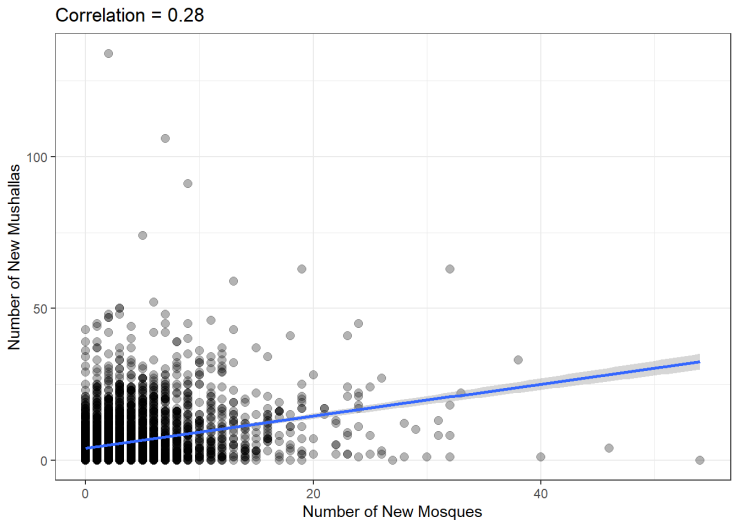
# Number of Mushalla per 1,000 Muslim Residents

Number of Mushallas per 1,000 Muslim Residents by Kabupaten



Population data is based on the 2010 census.  
Mushalla data is from the SIMAS system and was retrieved on December 31, 2022.

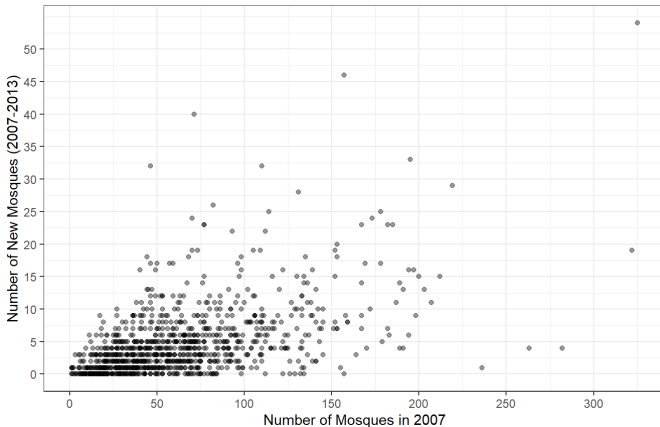
# Mosques - Mushallas Correlation



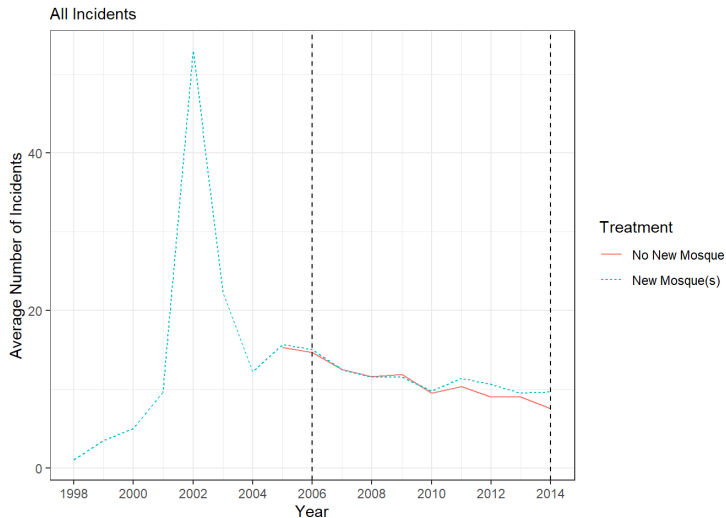
# Existing Mosque - New Mosque Correlation

New Mosques by Existing Mosques in Analyzed Kecamatan

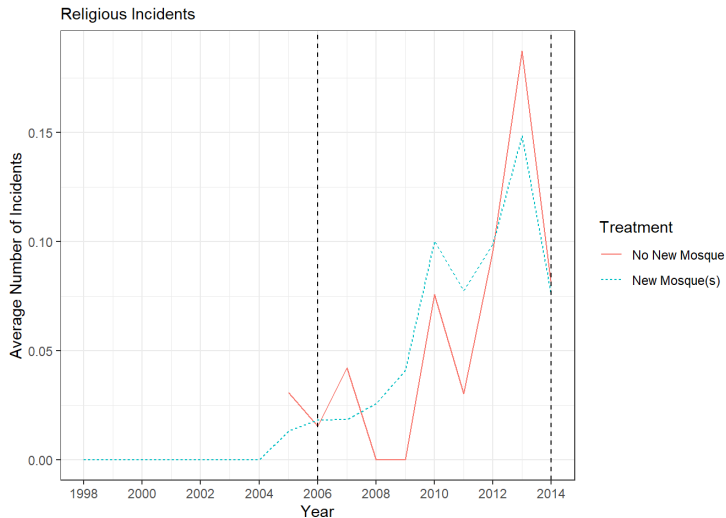
Correlation = 0.527



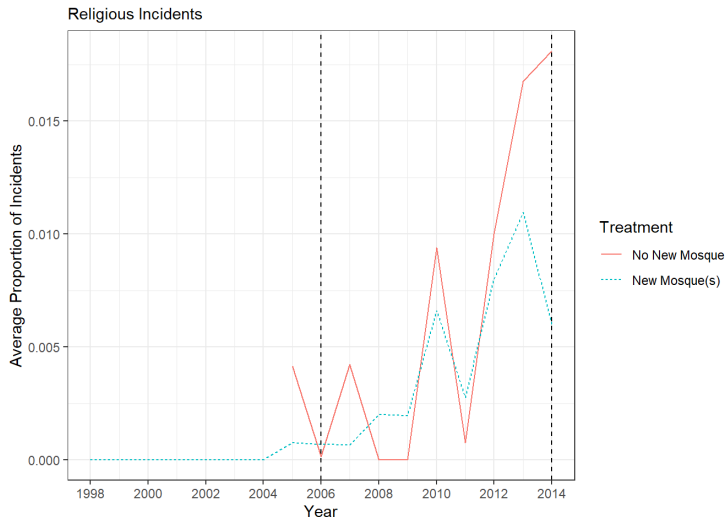
# Parallel Trends (NVMS)



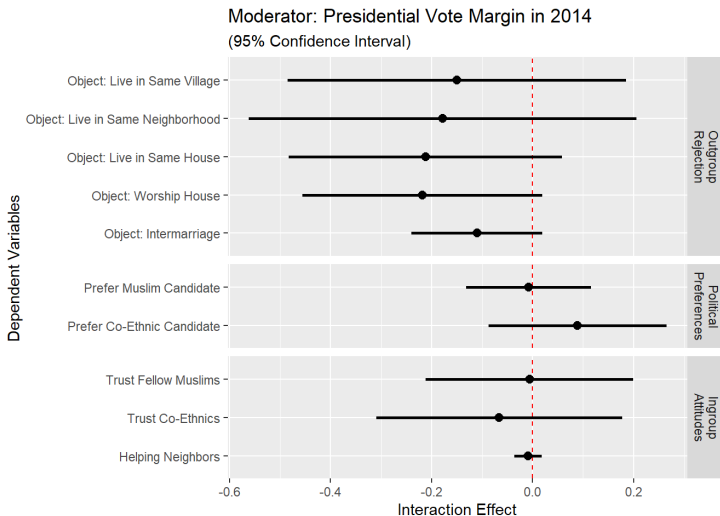
# Parallel Trends (NVMS)



# Parallel Trends (NVMS)



# 2014 Election: Vote Margin





# 2014 Election: Jokowi Share

