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# Religion, leadership, and coordination

Evidence from a lab experiment in the field



- In brief:**
- Coordinating economic actions across individuals can be critical to resolving collective action problems and market failures. Coordination – i.e., the ability to work together effectively – may be necessary for escaping poverty traps, for changing social norms, for optimising resource use on common land, or for improving the provision of public goods.
  - This study uses a coordination game to investigate whether introducing leaders facilitates coordination. The authors focus on the difference in coordination achieved by leaders of different religious identities. We conducted lab-in-the-field experiments with over 1,000 respondents across 44 towns in Uttar Pradesh, the largest state in India.
  - The authors find that leaders from religious minorities (Muslims in India) improve coordination, while leaders from the religious majority do not.
  - It is also shown that inter-group contact improves coordination irrespective of leader identity but affirmative action leads to a deterioration in coordination in the minority-led group, and increased coordination in groups led by majority leaders.

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## Overview of the research

Coordinating economic actions across individuals can be critical to resolving collective action problems and market failures. For instance, coordination may be necessary for escaping poverty traps, for changing social norms, for optimising resource use on common land, or for improving the provision of public goods. Several mechanisms to improve coordination have been considered in the academic literature, with one prominent solution being the utilisation of leaders. This study examines whether introducing leaders of different religious identities facilitates coordination. Most societies contain people of different religions, ethnicities and genders, and it seems plausible that the success of leaders in achieving coordination in socially diverse groups can depend upon leader identity.

This question is typically difficult to answer using observational data because this can usually only identify the combination of leader preferences and citizen reactions to leader identity. To overcome this challenge, we use a lab-in-the-field experiment that can isolate citizen reactions to the identity of the leader separately from leader preferences.

The lab-in-the-field experiment consists of a coordination game in which participants are randomly assigned into a group of four consisting of two Hindus and two Muslims. We focus upon the common situation in which people from a religious minority need to coordinate with people from a religious group that has a numerical majority. The game involves two stages. In the first stage, participants play the coordination game for four rounds, and payoffs are designed to induce coordination failure. In the fifth period a leader is randomly selected among the four group members with some groups having Hindu leaders and others Muslim leaders. By selecting the group leader at random from the group, we avoid self-selection into leadership based on experience, ambition, or other characteristics. The leader's role is to suggest an effort level to coordinate around. Previous work has shown that even when leader suggestions are non-binding they can improve coordination. Group members then play the coordination game again, for two rounds with the same leader. This allows us to test whether introduction of leaders of the two religions improves coordination and how this varies with leader identity.

To extend the analysis into the policy domain and to test the effectiveness of two policies that are often used to aid disadvantaged groups, we randomly assign groups into two treatments, retaining a third group as a control. One treatment replicates an affirmative action (AA) policy that involves reserving half of the leader positions for the minority group, and the other replicates an inter-group contact policy, achieved by having mixed groups collaborate in solving a puzzle before coordination is measured. We also present estimates distinguishing towns with and without a history of inter-group conflict. This novel design allows us to investigate how the efficacy of two popular interventions varies with a baseline measure of coordination and also how the effectiveness of these policies varies with a history of high vs low conflict in the area.

In contrast to the leader-coordination literature that has been entirely conducted in the laboratory, we conducted our experiment in the field in Uttar Pradesh, India's largest state. We sample Muslims, who are a minority in India (constituting 19% of the population in this state), and Hindus, who are the majority religious group. In the experiment, 1,028 Hindu and Muslim subjects from 44 selected towns participate. Half the towns were selected from districts that had a history of inter-religious conflict.

## Policy motivation for research

This paper sets out to explicitly examine the impact of two prominent policies on leaders' ability to coordinate, i.e., get groups of people to work together effectively. Affirmative action (AA), the first policy we test, often involves legislating quotas for under-represented groups in government positions, educational institutions or jobs. Previous work has demonstrated that AA policies can help disadvantaged groups overcome societal biases. However, AA policies can also generate significant backlash against recipients of quotas if recipients are perceived to be less skilled or if the policy is considered unfair. We are the first to study the impact of AA on coordination.

Inter-group contact, i.e. having mixed identity groups collaborate, the second policy we study, is possibly the most common policy suggested to reduce intergroup conflict, and the literature shows that inter-group contact can change attitudes and improve cooperation towards the outgroup. However, no previous work has analysed the effectiveness of contact in improving coordination, nor how this varies with leader identity. Importantly, ours is also the first study to analyse affirmative action and inter-group contact in the same setting, allowing for a direct comparison of their impact.

This project also aims to improve policymakers understanding of the relationship between conflict, coordination, and the effectiveness of group-specific policies. In particular, both affirmative action and inter-group contact have the potential to correct for disadvantages such as perceptions of unequal access to resources and services, which is often a primary cause of conflict. Affirmative action policies are traditionally used to aid disadvantaged groups that have currently or historically suffered from unequal access to resources. Conflict-affected societies often live in segregated communities that may intensify existing prejudices, and inter-group contact may thus offer a potential strategy to increase mutual understanding and regard and ultimately reduce prejudice and the potential for future conflict. We provide important new results testing whether the impact of such policies varies with leader identity, in areas of past conflict intensity, the very places where we would like such policies to be most effective.

## Research findings

This research identifies the following results:

Key research question	Summary of the key findings
What is the impact of introducing leaders of different religious identities on coordination outcomes?	The introduction of Muslim leaders increases coordination by 31%, while the introduction of Hindu leaders has no significant impact on coordination. We argue that these results may be explained by stronger in-group behaviour of the minority group. Consistent with this explanation, we find that in Muslim-led groups in Muslim-minority towns, Muslim individuals choose higher effort but Hindu individuals choose lower effort.
What is the impact of an affirmative action policy on the	Affirmative action leads to a deterioration of coordination in Muslim-led groups, alongside an

ability of leaders to improve coordination?	increase in coordination in Hindu-led groups. This suggests that affirmative action such as quotas for minorities may generate backlash against those groups it is supposed to benefit, although only in minority-led groups.
What is the impact of an inter-group contact policy on the ability of leaders to improve coordination?	We identify that inter-group contact improves coordination irrespective of leader identity.
Does the impact of affirmative action and inter-group contact policies differ by exposure to past religious conflict?	Conflict history does not significantly influence treatment impacts in Hindu-led groups, but both policy treatments have larger impacts in low conflict areas relative to the control, in Muslim led groups.

## Policy recommendations

- **Encourage inter-religious contact**

Often towns and villages, particularly in India, are segregated based on religious or caste affiliation. Our research shows that coordination improves when inter-religious groups interact in a non-competitive setting.

- **Policymakers should be wary about implementing affirmative action policies in areas prone to high conflict especially when the leaders are from the minority group.**

Previous work has demonstrated that AA policies can help disadvantaged groups overcome societal biases. However, our research also shows that AA policies can generate significant backlash against the recipients of quotas under certain conditions. This may be because AA is perceived as unfair. This backlash is particularly strong under Muslim leaders and in conflict-prone areas where in-group favouritism and out-group discrimination is likely to be more pronounced.