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# How status inequality between ethnic groups affects public goods provision

Experimental evidence on caste and tolerance for teacher absenteeism in India

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**Abstract:** This article contributes to the growing scholarship on how ethnic inequality can dampen the provision of public goods and services. On the one hand, it pushes beyond purely economic inequality to include status inequality between population groups. On other hand, it moves away from the provision of social services, conceptualized through budgetary allocations, to their effective functioning. We study one of the most serious challenges to the effective functioning of social services: the absenteeism of service providers. We provide experimental evidence that in a situation of status inequality between groups, people are more likely to be tolerant of absenteeism among service providers when the intended beneficiaries are perceived to belong to low-status ethnic groups. In particular, we present results from two complementary randomized survey experiments in India. Both show that respondents are more tolerant of teacher absenteeism when schools serve low- rather than high-caste children.

**Keywords:** caste, ethnic inequality, India, public goods provision, survey experiment, status, teacher absenteeism **JEL classification:** H40, J15, O15

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#### 1 Introduction

That ethnic diversity dampens the provision of public goods has been considered "one of the most powerful hypotheses in political economy" (Banerjee et al. 2005: 639).<sup>1</sup> A large and influential body of scholarship has argued that ethnic diversity impedes the provision of a wide range of public goods across countries, regions, cities, and communities from sub-Saharan Africa and South Asia to North America (Alesina et al. 2001; Gilens 1996).<sup>2</sup> Such has been the "consensus" that ethnic heterogeneity dampens public goods provision that scholars working in this research tradition have sought to take the "next step" of exploring the micrologics of this connection (Habyarimana et al. 2009: 5; see also Lieberman & McClendon 2013). And yet this thesis about the negative impact of ethnic diversity on public goods provision has been powerfully challenged in recent years (see Singh & vom Hau 2016). There is a growing body of empirical evidence that ethnic diversity does not dampen state provision, including from the cases on which the most seminal formulations of the "diversity-development deficit" were based—US cities (Hopkins 2011; Lee et al. 2015; Rugh & Trounstine 2011; Trounstine 2013) and African states (Miguel 2004; Gibson & Hoffman 2013; Gisselquist et al. 2014). Scholars have also suggested that the impact of ethnic diversity on public goods provision varies by ethnic cleavage (Alesina et al. 2003; Chaves and Gorski 2001; Singh 2011, 2016), type of public good (Gisselquist 2014), and unit of analysis (Gerring et al. 2015). An important strand of work within this revisionist scholarship on ethnic diversity and public goods provision has argued that it is not ethnic diversity but levels of economic inequality between ethnic groups that impede public goods provision (Alesina et al. 2016; Baldwin & Huber 2010).

This article takes as its starting point this important move towards analyzing the influence of inequality between ethnic groups on public goods provision. It seeks, however, to advance the existing scholarship both through a wider conceptualization of inequality and by analyzing the mechanisms by which inequality between ethnic groups might influence public goods provision. We conceptualize ethnic groups, following Varshney (2001: 365), in terms of Horowitz's (1985) broad definition as all groups based on ascriptive group identities such as race, language, religion, tribe, or caste. We move beyond the dominant emphasis on inequalities of economic assets and political power to focus on the relatively understudied inequalities of status, which we argue work beyond, and often lie at the root of, inequalities of income and political power.

We argue that in states with inequality of status between ethnic groups, political elites will underemphasize the provision of social services that are seen to primarily benefit lower-status ethnic groups. An arguably more critical challenge than provision, especially in the context of

<sup>&</sup>lt;sup>1</sup> The two distinguishing features of a public good are that it is non-excludable and non-rival. Insofar as excludability is always technically a possibility in the provision of schools, health centers, and services such as water and electricity, the current application of the term in the political economy scholarship does not refer to public goods in the strict sense. Access to public goods and services can be externally limited, for example, by (national) citizenship, and internally restricted, sometimes explicitly but more often implicitly, by class, ethnicity, and/or gender.

<sup>&</sup>lt;sup>2</sup> The negative relationship between ethnic diversity and public goods provision has been shown to hold crossnationally (e.g., Alesina et al. 2003; Baldwin & Huber 2010; Lieberman 2009); in specific world regions, including sub-Saharan Africa (e.g., Easterly & Levine 1997; Jackson 2013), South Asia (e.g., Bardhan 2000; Banerjee et al. 2005; Khwaja 2009), and North America (Alesina et al. 1999); across different units of analysis, whether countries (Alesina et al. 2003; Baldwin & Huber 2010; Easterly & Levine 1997), cities (e.g., Alesina et al. 1999), local districts and municipalities (e.g., Bardhan 2000; Habyarimana et al. 2009), or specific infrastructure projects (e.g., Khwaja 2009; Miguel & Gugerty 2005); and across different public goods, most prominently schools (e.g., Alesina et al. 1999; Easterly & Levine 1997; Miguel & Gugerty 2005), health (e.g. Banerjee et al. 2005; Baldwin & Huber 2010), and basic infrastructure such as water and electricity (e.g., Alesina et al. 2003; Bardhan 2000; Khwaja 2009).

developing countries, is ensuring the proper functioning of social services. In this paper we delineate how inequality of status between ethnic groups can lead to an overlooking of inefficiencies in the functioning of social services when their beneficiaries are seen to belong to a low-status ethnic group. To paraphrase a recent World Bank briefing, states may build all the schools and clinics that they can, but these are of little use if the teachers and doctors do not show up to work (Rogers & Koziol 2011). Recent research has shown the severe inefficiencies in the functioning of social services created by the widespread absenteeism of service providers (Baneriee & Duflo 2006). High levels of provider absence, in themselves an indicator of problems of accountability within the education or health system, have been shown to exact enormous economic costs, and to contribute directly to poor social outcomes (Rogers & Koziol 2011). In this paper we draw on survey experiments to show that there are differences in popular tolerance for teacher absenteeism in India depending on the caste status of the students. People are less likely to censure an errant teacher when his or her students are perceived to belong to a lowerstatus rather than a higher-status ethnic group. This has serious implications for the quality of social services provided, especially to the most marginal and vulnerable sections of society, who are most in need of these services.

We begin with a brief discussion of the concept of status inequality and the way in which it manifests itself in India. We then delineate how status inequality between ethnic groups influences the provision of public goods and social services by the state. In the subsequent section we discuss how inequality of status between caste groups influences the institution and implementation of social policy in India. The next section outlines our survey experiments and the primary finding that people are less likely to be critical of teacher absenteeism when the beneficiary is seen to belong to a low-status rather than a high-status ethnic group. We conclude with the generalizable implications of the study.

#### 2 Status Inequality

Recent work on the relationship between ethnic inequality and public goods provision has tended to focus exclusively on differences in levels of economic inequality between ethnic groups (Alesina et al. 2012; Baldwin & Huber 2010). Yet economic inequality is only one, and arguably not the most important, type of inequality. In his classic analysis of 1918, Weber (Weber et al. 1958) distinguished three different but interrelated bases for inequality in industrial societies: resources, power, and status. Status inequality, as defined by Weber, is inequality based on differences in honor, esteem, and respect (Weber et al. 1958). Social science scholarship has tended to focus more on inequality of resources and power, conceptualized in terms of income, wealth, occupational structures, social mobility, and so on. Inequality of status is, however, a critical and independent, if relatively underappreciated, dimension of social stratification, both historically and in contemporary societies (Ridgeway 2014).

In her 2013 presidential address to the American Sociological Association, Cecilia Ridgeway narrated a telling incident:

An airport shoe-shine man once asked me what I did. When I told him, he said, "My daughter wants to go to Stanford and be a physician. What I do is just for her; I want her to be someone." Now, what was that about? Power? Not so much. Money? Yes, a bit. But above all it is about public recognition of his daughter's social worth. It is about social status. Clearly, we cannot understand the fundamental human motivations that enter into the struggle for precedence that lies behind inequality if we do not also take into account status. (Ridgeway 2014: 2)

Inequality of status—the evaluative ranking of "types" of people and their worth—can create and/or reinforce differences in resources and power. Further, building on Ridgeway's analysis of Tilly (1998), status inequality may be seen as the basis for "durable inequality". Inequality based purely on organizational control of resources and power triggers a perpetual struggle between the dominant and the dominated, and is thus intrinsically unstable. But when control over resources and power is consolidated with a categorical difference in beliefs about worth and honor, inequality becomes stable and is likely to persist.

The concept of status inequality is not new to scholars of ethnic politics. Differences in status between ethnic groups are at the heart of Horowitz's (1971) dichotomy between vertical and horizontal ethnic systems. Vertical ethnic systems are marked by the presence of clearly superordinate and subordinate ethnic groups: "Relations among the groups partake of caste relations and are suffused with deference" (1971: 232). Horizontal systems, on the other hand, are marked by ethnic groups that exist in parallel and are not definitively ranked in social status: "Transactions can occur across group lines without necessarily implying anything about ascriptively based hierarchical relations" (1971: 232). Horowitz himself was building selfconsciously on Weber's distinction between a "caste structure" (i.e., a vertical order) and "ethnic coexistence" (i.e., a horizontal order). According to Weber, "The caste structure transforms the horizontal and unconnected coexistences of ethnically seggregated groups into a vertical social system of super- and subordination" (Weber et al. 1958: 189). Conditions of ethnic coexistences "allow each ethnic community to consider its own honor as the highest one; the caste structure brings about a social subordination and an acknowledgement of 'more honor' in favor of the privileged caste and status groups" (Weber et al. 1958: 189). The key difference for Weber, as for Horowitz, is the distribution of honor or prestige. In his later formulation of the distinction between ranked and unranked systems,3 Horowitz wrote that "in ranked systems the unequal distribution of worth between superiors and subordinates is acknowledged and reinforced by an elaborate set of behavioral prescriptions and prohibitions. In unranked systems, relative group worth is always uncertain" (1985: 24). The most common examples of status societies are the Indian caste system, the slavery and post-slavery society of North America, and the apartheid system of ethnic relations in South Africa (Fulcher & Scott 2011: 752).

Building on institutional conceptualizations of ethnicity (Lieberman & Singh 2012), we might think about measuring between-group inequality in terms of the degree to which status distinctions between ethnic groups are encoded in state institutions. Indeed, it is clear that the degree of status inequality between racial groups was far higher in Jim Crow America or apartheid South Africa as compared with Brazil, which did not institutionalize racial inequality at any point in its history. However, in large part due to a history of mobilization on the part of low-status groups, there are today virtually no cases of formally institutionalized status hierarchies between ethnic groups. Yet we know that differences in status between ethnic groups remain entrenched, including and perhaps particularly in places where legal institutions of equality have been enacted to eliminate previously enshrined status inequality between ethnic groups, including the US, South Africa, and India. That relations between ethnic groups in a place are characterized by inequalities of status might be obvious, especially to those from lower-status ethnic groups. On the other hand, as compared with economic or political inequality, it is difficult to precisely measure changes in the

<sup>&</sup>lt;sup>3</sup> Horowitz's (1985) distinction between ranked and unranked systems is closely related to his distinguishing of vertical and horizontal ethnic systems, except that he bases the dichotomy between ranked and unranked systems explicitly on the coincidence of group membership and social class.

degree of status inequality between ethnic groups in a place over time, or to conclusively assess whether the degree of status inequality between ethnic groups is higher in one place as compared with another. A recent article seeks to measure status inequality by looking at the degree of overrepresentation of the high-status groups amongst the literate population of a political unit (Survanarayan 2016).<sup>4</sup> Another potential way to think about measuring status inequality might be in residual terms. Economic and political inequality between ethnic groups that is not explained by standard factors can be attributed to processes (such as discrimination) that stem from inequalities of status. We might say that we can see status inequality at work where there remain significant inequalities in economic and political resources between ethnic groups even after controlling for differences in skill, as reflected, for example, in levels of education. This was and remains the case with racial groups in the US and South Africa, and with caste groups in India. These questions of measurement, important in themselves, are, however, bracketed for the remainder of this paper insofar as we focus on an unambiguous case of status inequality, discussed by Weber himself-the caste system in India. We use this case to demonstrate how status inequality between ethnic groups can lead to grave inefficiencies in the provision of public services for lower-status ethnic groups.

#### 3 Status Inequality in India

In this paper we will focus on what is widely cited as one of the starkest examples of a status hierarchy between ethnic groups—the caste system in India.<sup>5</sup> The caste system is usually described as a segmental division of society into a hierarchy of endogamous and hereditary groups based primarily on occupation.

At the very top of the caste sytsem were the priestly class of Brahmins, considered the spiritual and intellectual leaders of society, followed by the Kshatriyas—the rulers and warriors—and then the Vaishyas, who are the farmers, merchants, and traders. These were the "twice born", who were believed to have been through several human incarnations. Next came the Shudras, the unskilled workers and manual laborers, who were not believed to have been reincarnated. The lowest stratum were menial workers engaged in tasks that were considered unclean or polluted, who were considered "untouchable", outcasts from Hindu caste society. Occupational distinctions between castes were associated with differences in status (Stevenson 1954). Caste groups lower in the hierarchy were considered "inherently inferior" (Islam 1973: 103) and obliged to show deference, often through highly humiliating practices, to castes above them in the status hierarchy.<sup>6</sup> Social interaction between castes was based on rules of purity and pollution that were often rigidly enforced (Dumont 1970; Ghurye 1969).

<sup>&</sup>lt;sup>4</sup> Valid in itself, a measure of status inequality that incorporates access to public goods provision would, however, not be appropriate for a study such as this, which seeks to examine how status inequality influences public goods provision.

<sup>&</sup>lt;sup>5</sup> The caste system has long been seen as a defining feature of the social, political, and economic system in India. Of all the topics in the study of India, it is the one that has arguably been most written about. Analyses of caste span the disciplines of anthropology and sociology (for example, Dumont 1970; Srinivas 1962), history (for example, Dirks 2001), political science (for example, Kothari 1970; Rudolph & Rudolph 1967; Jaffrelot 2003; Weiner 2001), economics (for example, Banerjee & Somanathan 2001; Deshpande 2011; Desai & Dubey 2012; Hoff & Pandey 2003), and legal studies (for example, Galanter 1963).

<sup>&</sup>lt;sup>6</sup> Lower castes, including lower-caste women, in the princely state of Travancore, now Kerala, were, for example, obliged to bare their breasts in the presence of higher-caste men.

For scholars such as Weber (1958) and Dumont (1970), caste was a representation of "pure status" based on religious and ideological grounds (Milner 1994; Dumont 1970; Weber 1958), with economic inequalities being epiphenomenal to caste status (Desai & Dubey 2012: 41). There is today an animated debate about the salience of caste in contemporary India—specifically over the extent to which state policies of affirmative action in electoral, employment, and higher education institutions over 60 years of democratic rule, more than two decades of high rates of economic development, and the increasing importance of market forces and growing urbanization have led to a weakening of the caste system.<sup>7</sup>

It is clear that the religious and ideological grounds for the caste system have been debunked (Béteille 1991; Fuller 1997: 13). We can certainly speak of the "hold of caste" becoming weaker insofar as, educationally and materially, caste is not as key a determinant of individuals' life chances as it used to be;<sup>8</sup> socially, there are more interactions; and electorally, there is less voting along caste lines, and greater political representation for lower castes. And yet caste, in addition to remaining socially and politically salient, endures as an important basis for inequality. A number of scholarly studies have shown the persistence of caste differentials in consumption, income, education, occupation, and development indices (Desai & Dubey 2012; Deshpande 2011; Siddique 2011; Thorat & Newman 2010; Madheswaran & Attewell 2007; Munshi & Rozenzweig 2006, 2009).<sup>9</sup> Critically, caste also remains a basis for entrenched inequalities of status. Even today, the everyday existence of many lower castes, especially the formally untouchable castes or Dalits, is a sequence of humiliations and harassments on account of their lower status.<sup>10</sup> Their position in the status hierarchy makes Dalits the subject of daily, often deadly attacks.<sup>11</sup> As discussed earlier, survey evidence that substantial disparities in income between caste groups remain even after controls for education (Desai & Dubey 2012) can be seen as pointing to the way in which inequalities of status can drive economic inequalities between ethnic groups.

Perhaps the clearest indicators of the continued inequalities in status between caste groups in India is the centrality of the quest for status, often couched in the language of greater dignity, respect, and pride, in contemporary Dalit mobilizations. The inculcation of Dalit pride has been the primary platform of the Bahujan Samaj Party (literally the society of the (oppressed) majority) under Mayawati, the acknowledged political leader of the Dalits. Ethnographic studies have shown

<sup>&</sup>lt;sup>7</sup> In a sense this is a debate that has been ongoing since about the 1960s. Béteille (2012) describes the furor in Indian newspapers sparked by M. N. Srinivas's (1962) argument about the continuing salience of caste in the social and political life of India, as well as the scholarly debate between Srinivas and N. K. Bose (1975), who believed that the time when caste provided the basic framework of Indian society was over.

<sup>&</sup>lt;sup>8</sup> Studies have pointed to a destruction of the caste-based system of production in the villages and at the local level (Srinivas 2003); a decline in caste-based occupational segregation (Béteillle 2012); a lack of caste-based discrimination in the callback decisions of firms in the software sector (Banerjee et al. 2009); the emergence of entrepreneurs (Damodaran 2008; de Jacquelot 2011); the move of lower castes into the ranks of the burgeoning middle class (Manor 2012); an improvement in their consumption patterns, and an associated narrowing of inequalities (Kapur et al. 2010).

<sup>&</sup>lt;sup>9</sup> Scholars have also documented the continued discriminatory barriers in the formal urban labor market, even for highly qualified Dalits (Thorat & Newman 2007; Thorat & Attewell 2007; Deshpande & Newman 2007; Jodhka & Newman 2007; Ito 2009), and an under-representation of members of marginalized castes in the ownership of enterprises (Iyer et al. 2013) and on the corporate boards of top companies (Ajit et al. 2012).

<sup>&</sup>lt;sup>10</sup> It is clear that untouchability continues to be practiced across many parts of India, according to a 2010 report by the National Human Rights Commission (NHRC 2010). Dalits are prevented from entering the police station in 28% of Indian villages. Dalit children have been made to sit separately while eating in 39% of public schools. Dalits do not get mail delivered to their homes in 24% of villages, and they are denied access to water sources in 48% of villages (Jha 2016).

<sup>&</sup>lt;sup>11</sup> The same NHRC (2010) report details that a crime is committed against a Dalit every 18 minutes. Every day, on average, three Dalit women are raped, two Dalits murdered, and two Dalit houses burnt (Jha 2016).

that an important reason that Dalits want Mayawati to be prime minister of the country is that this would increase "*the value of Dalits* in India" (Badri Narayan cited in Jayal 2013b: 66; emphasis in original). Dalit writers emphasize how their experiences of humiliation at the hands of caste Hindus "form a crucial explanatory role in fights for dignity in Dalit narratives" (Prasad cited in Rawat & Satyanarayana 2016: 300). The International Day of Dalits' Struggle is also marked as World Dignity Day.

Post-independence India has witnessed important lower-caste movements, especially since the 1990s, for greater educational, economic, and political opportunities. But in many ways all of these can be seen as mobilizations for the means to gain greater status.<sup>12</sup> Much as for ethnic groups towards the bottom of status hierarchies in other places in the world that are characterized by between-group status inequality, the fight to be respected, dignified, and recognized as of equal worth for lower castes in India has been the most salient and yet most difficult fight of all.<sup>13</sup> This is exemplified by the humiliation that even highly educated, wealthy, politically powerful members of lower-caste groups continue to face on account of their position in the status hierarchy (for the continued indignities and humiliation faced by Dalit billionaires, see IDSN (2011)).

### 4 How Status Inequality Influences Public Goods Provision by the State

The question of how status inequality might influence the provision of public goods has been relatively underexplored. Weber and Horowitz theorized about, and scholars building on their work have sought to assess, how status inequality between ethnic groups might influence a range of outcomes, including the degree of societal cohesion, the cleavages along which conflict will emerge, and the nature of ethnic politics (see for example, Gisselquist 2014; Suryanarayan 2016), but not social policy and the provision of public goods.

Most studies that show a negative relationship between ethnic diversity and public services focus on provision via the collective action of local communities (e.g., Algan et al. 2011; Bardhan 2000; Khwaja 2009; Miguel & Gugerty 2005; Fearon & Laitin 1996). This is brought out clearly in a summary of the scholarship by Habyarimana et al. (2007: 709), who write: "A central question in political science is why some communities are able to generate high levels of public goods." The capacity of communities to act together, for instance, to raise funds for schools, collect garbage, repair roads, clear drains, and maintain other public infrastructure projects, is clearly a very important channel for the provision of essential social services. Across most parts of the world the provision of public goods, however, is perceived as and remains primarily a state responsibility. In other words, approaching public goods provision at the community level of analysis only covers a particular subset of the larger phenomenon, and therefore sits uncomfortably with the global historical reality of states as the primary providers of public services. This shortcoming has been recognized forcefully in a recent review of the political economy scholarship by Banerjee et al. (2006: 1), seminal contributors to this field, who write: "a large part of the variation in access to public goods seems to have nothing to do with the 'bottom-up' forces highlighted in these political economy models and instead reflect more 'top-down' interventions." And a large social science literature on welfare states highlights the truly dramatic (yet uneven) historical rise and expansion of state-sponsored public infrastructure and social services across the globe over the last 150 years.

<sup>&</sup>lt;sup>12</sup> The recent movement to deify English as a Dalit goddess is also best understood in terms of the recognized power of the language to bestow greater status upon them (Babu 2010).

<sup>&</sup>lt;sup>13</sup> See, for example, the call to be treated with dignity and equal worth inherent in the Black Lives Matter movement.

The question that we focus on in this paper is thus: how does status inequality between ethnic groups affect the provision of public goods and services by the state?

We argue that the primary process through which this takes place is the differential priority accorded to the provision and functioning of public goods depending on whether they are perceived as being used by lower- or higher-status ethnic groups. This influences both the institution and implementation of social policy (Figure 1). Following the scholarship on policymaking, especially in a developing-country context, we hypothesize that the *institution* of social policy is a more top-down process driven by political elites,<sup>14</sup> while the *implementation* of social policy is often more bottom-up and influenced to a greater extent by the people as a whole. In states with a high degree of status inequality between ethnic groups, political elites will underemphasize the provision of social services that are seen to primarily benefit lower-status ethnic groups. Further, in states with a high degree of status inequality between ethnic groups, there is likely to be greater popular tolerance for inefficiencies in the provision of public goods when they are seen to have lower-status beneficiaries. Building on an understanding of differences in status as differences in the assignment of worth, we suggest that at the root of this are elite and popular beliefs about whether members of low-status ethnic groups are worthy or deserving of public goods and services.

When the status of different ethnic groups is unequal, political elites are less likely to perceive the provision of social services and goods to lower-status groups as a policy priority. When status inequality between ethnic groups is enshrined in formal institutions, as was the case in Jim Crow America and apartheid South Africa, lower-status groups can simply be excluded from the provision of social services. But even under conditions of formal citizenship rights extending to all, including to members of lower-status ethnic groups, political elites tend not to prioritize the provision of public services that are seen to benefit members of lower-status ethnic groups.

The institution of a progressive social policy is necessary, but it is equally important that these policies are effectively implemented. Far too often, especially in the developing world, the ineffective functioning of public goods and services severely limits the gains from progressive social policies. When there is an inequality of status between different ethnic groups, people are less likely to emphasize the effective functioning of public goods that are seen to primarily benefit lower-status ethnic groups. There is likely to be higher popular tolerance for the ineffective functioning of public goods and services when users are perceived to belong to ethnic groups lower in the status hierarchy. This is the central hypothesis that we seek to test in this paper.

We focus in particular on the popular tolerance for provider absenteeism. Teachers and doctors showing up to work is a necessary condition for children to be educated and healthy. And yet this most basic step in the implementation of social policies is widely acknowledged as a key barrier to the improvement of welfare outcomes in developing countries. Recent studies demonstrate the

<sup>&</sup>lt;sup>14</sup> Here we follow scholarship that emphasizes the decisive control of political elites, especially elected officials, over the "policy agenda" (Kingdon 1984). There are studies that suggest that an issue is more likely to rise to agenda prominence if it is congruent with public preferences and ideology (Manza & Cook 2002; Erikson et al. 1993; Page & Shapiro 1983), or the "national mood" more broadly defined (Erikson, et al. 2002; Kingdon 1984). Other studies, however, have shown that the effects of public opinion on public policy in the US in many of these studies have been significantly overestimated (Burstein 2006: 2002). The role of the public in influencing the policy agenda is likely to be even more modest in developing countries, where the means to gauge public opinion, such as opinion polls, media, and meetings with advocacy groups, are typically more limited, and patronage politics is more prevalent. The decisive control of political elites over the policy process has been identified as a characteristic of the "third world policy process" more broadly (Horowitz 1985).

seriousness of the problem of provider absenteeism, especially in developing countries. Results from surveys in which enumerators made unannounced visits to primary schools and health clinics in Bangladesh, Ecuador, India, Indonesia, Peru, and Uganda show that averaging across the countries almost 20% of teachers and 35% of health workers were absent from the facilities at the time of the visit.<sup>15</sup> Surveys have found that absence is typically fairly widespread, rather than being concentrated on a small number of "ghost" workers. Insofar as up to 90% of recurring government expenditures on education and health are on salaries for teachers and doctors, these absences exact a significant fiscal cost. As a recent study puts it, even a 5% rate of absenteeism among teachers means that 4.5% of the recurrent education budget is being wasted, which implies that other educational needs are going unmet. Provider absenteeism also has grave consequences for the quality of public goods provided. Because substitutes rarely replace absent teachers, it is quite common for small schools and clinics to be closed because of provider absence. A study by Miller et al. (2008) in the US estimates that each 10 days of teacher absence reduces students' mathematics achievement by 3.3% of a standard deviation. Duflo and Hanna (2005) show that a randomized intervention that reduced teacher absence from 36% to 18% led to a 0.17 standard deviation improvement in student test scores. There have been a number of innovative attempts to reduce absenteeism in state schools and health facilities.<sup>16</sup> These strategies can broadly be divided into those that seek to improve incentives for providers through rewards and punishments implemented by external monitors, and those that facilitate greater involvement on the part of the potential beneficiaries of the service. In general, the latter strategy has proved to be quite disappointing. One of the main reasons why attempts to check provider absenteeism through popular involvement, whether it be local monitoring or community participation, have failed is because people are reported to be not "particularly upset about the state of education and public health services" (Banerjee and Duflo 2006).<sup>17</sup> And yet we argue that popular tolerance for inefficiencies in public goods provision, such as provider absenteeism, varies by the status of the perceived beneficiaries. In particular, we hypothesize that people are more likely to be tolerant of provider absenteeism when the beneficiaries of the public services are seen to belong to a lowerstatus rather than a higher-status ethnic group.

#### 5 How Status Inequality Influences State Public Goods Provision in India

We provide empirical evidence in support of this theoretical framework through a discussion of how inequality of status between caste groups has dampened the provision of public goods in India. We focus in particular on primary education, because of its prominence as a public good that has been studied by the political economy scholarship (see, for example, Alesina et al. 1999; Miguel 2004) as well as its critical importance for India. For many decades now, India has held the ignominious distinction of being home to an overwhelming proportion of the world's total illiterates.

At its independence from British colonial rule in 1947, India inherited a sparse educational infrastructure, a product of very low budgetary allocations to education by the British Raj through

<sup>&</sup>lt;sup>15</sup> Absence among public school teachers in the United States is relatively low— they are absent 5-6% of the days schools are in session—but is nearly three times the absence among managerial and professional employees (Miller et al. 2008).

<sup>&</sup>lt;sup>16</sup> For a review of the strategies that have been implemented using randomized evaluation techniques see Banerjee and Duflo (2006).

<sup>&</sup>lt;sup>17</sup> This, according to Banerjee and Duflo (n.d.), is because people have low expectations of the healthcare system, and as a result have little desire to invest time and energy in making it better.

the 19th and into the mid-20th century.<sup>18</sup> Consequently, the country was characterized by abysmal literacy rates. According to the first census of sovereign democratic India, conducted in 1951, less than 20% of the population was literate. However, because of the traditional association of the caste structure with an occupational division of labor—in which "twice-born" castes were associated with priestly, scholarly, and trading occupations that required being lettered, while the Shudras and untouchables were associated with manual labor and scavenging respectively—and the often explicit prohibition of lower castes from state schools, illiteracy was disproportionately concentrated among caste groups at the lower end of the status hierarchy. Members of ethnic groups towards the top of the status hierarchy, even when they were relatively poor, were much more likely to have had access to facilities of primary education and to be literate as compared with those towards the bottom, even when the latter were economically better off.<sup>19</sup>

According to the 1931 census of colonial India, the all-India literacy rate for the so-called depressed (formerly untouchable) castes was 1.6%, while that for Brahmins was 33.4%.<sup>20</sup> It is also important to note that while average literacy was low, the small numbers of literates, who were overwhelmingly from higher castes, were highly educated.<sup>21</sup> During the early post-independence decades the gap between the literacy rates of former untouchable castes, referred to as Scheduled Castes (SCs), and the "general population" increased, reaching a high of 22% in 1981. Even though a large proportion—indeed, into the 1970s, over a majority—of the non-SC population was also illiterate, illiteracy came to be seen as a primarily lower-caste issue.

But lower castes were seen to be less deserving of education. The belief that education was meant for upper castes, who worked with their minds, and not for lower castes, who were meant to toil with their hands, was commonplace, even among prominent nationalist leaders, during the late colonial period. Bal Gangadhar Tilak, a leading figure in India's independence movement, for example, opposed the extension of mass education to members of lower castes (and also to women), for whom education was "unsuited and useless" (Tilak 1881).<sup>22</sup> Strikingly, such views persisted into at least the late 20th century. Drawing on extensive interviews with political elites, as well as a close reading of policy documents, Weiner (1991) points to a set of deeply held beliefs, widely shared irrespective of partisan or religious attitudes by educators, social activists, trade unionists, academic researchers, and members of the Indian middle class more broadly, about how education was "inappropriate" for lower-caste children, who should instead be taught to work

<sup>&</sup>lt;sup>18</sup> Chaudhary et al. (2015) note that as late as 1931 the government of India allocated less than one rupee per person to education, and public spending accounted for only 0.74% of national income.

<sup>&</sup>lt;sup>19</sup> Wealthy Izhavas continued to be excluded from state schools on the basis of their lower-caste status in Travancore in the later part of the 19th century, while these same schools admitted (and often provided free education to) higher-caste Nambudris and Nairs (Singh 2016).

<sup>&</sup>lt;sup>20</sup> While they conceal regional variation, these all-India averages are representative of a general pattern of stark difference in access to education by ethnic groups depending on their status rank. The sharpest difference in education levels was seen in provinces such as Madras and Bombay, where 80% of Brahmin males could read and write as compared with less than 3% of the total population of the "depressed castes". It is also important to point out that while Brahmins were the most literate caste in Bombay, Central Provinces, and Madras, literacy rates for other upper castes such as the trading castes matched or exceeded Brahmin literacy in many other provinces including Bengal, Bihar, and Uttar Pradesh, where over 70% of Kayasth males were literate (Chaudhary et al. 2015).

<sup>&</sup>lt;sup>21</sup> For example, according to the 1931 census, among male literates 13% could read and write English (Chaudhary et al. 2015).

<sup>&</sup>lt;sup>22</sup> Tilak (1881) wrote that teaching "reading, writing and rudiments of history, geography and mathematics" to Kunbi children (a lower-status caste associated traditionally with agriculture) was likely to do "more harm than good to them" and that they should be taught their traditional occupation. In general, he supported the institution of technical schools for lower castes so that they could learn "the most ordinary trades, like those of a carpenter, blacksmith, tailor and mason".

with their hands. Such beliefs, according to Weiner (1991), lie at the root of the Indian state's neglect of primary education on the one hand, and its lax child labor laws on the other.<sup>23</sup>

To be clear, there was an awareness and rhetorical commitment to the problem of illiteracy. On the eve of India's independence from British rule, in his famous "tryst with destiny" speech. India's first prime minister, Jawaharlal Nehru, declared the eradication of "ignorance and disease" as one of the most crucial tasks that the country faced. Socialism was one of the foundational constitutional tenets of independent India, and the Indian state has not shied away from intense intervention in many policy arenas. Yet it has all but ignored the provision of primary education. Unlike in many other developing countries, there has been no move towards making primary education compulsory in India.<sup>24</sup> Budgetary expenditures, and associated levels of literacy, have been lower in post-colonial India as compared with countries at similar levels of economic development (for example, Nigeria, Zambia, Ghana, Malawi, Tanzania, and Zimbabwe) as well as some of its South Asian neighbors, such as Bangladesh and Sri Lanka, which have had lower rates of economic growth, a far more uneven record of democracy, a high degree of political volatility, and widespread civil conflict.<sup>25</sup> In a further clear indicator of the low priority accorded to public goods seen to have primarily lower-caste beneficiaries, even within New Delhi's meager financial outlays on education, a disproportionally higher sum was channeled away from primary education towards secondary and higher education, which benefitted the literate, overwhelmingly upper castes.

Not only has there been low state priority for education in India, but the implementation of educational policy has been plagued by severe inefficiencies. One of the most serious of these is teacher absenteeism.<sup>26</sup> The 1999 Public Report on Basic Education (PROBE Team 1999) noted that one third of the head teachers in surveyed districts in five Indian states were absent from school.<sup>27</sup> More recently, unannounced visits to a nationally representative sample of public primary schools in India in 2003 showed that one in four teachers was absent.<sup>28</sup> Surveys have found that

<sup>&</sup>lt;sup>23</sup> Nobel Peace Prize winner and campaigner for the rights of children in India Kailash Satyarthi has also repeatedly spoken about how widespread caste-based beliefs about the appropriateness of education versus work for members of different castes keep low-caste children out of school and in (often dangerous) workplaces across India. The recent, much criticized amendments to the Indian child labor laws that make exclusions for, and thus legalize, "caste-based occupation" would seem to provide further proof of such caste-based beliefs at work among India's leading political classes (Press Trust of India 2016).

<sup>&</sup>lt;sup>24</sup> For an analysis of the way in which discussions in the Constituent Assembly led to primary education being excluded from the fundamental rights and relegated to the non-directionable "Directive Principles of State Policy" see Jayal (2013a).

<sup>&</sup>lt;sup>25</sup> For a critical analysis of the argument that the absence of a progressive social policy in India was an unavoidable product of the country's low level of economic development see Singh (2013).

<sup>&</sup>lt;sup>26</sup> Teacher absenteeism in India, as in many other parts of the world, is part of a broader problem of absenteeism of social service providers. Rates of absenteeism of health service providers match, and often exceed, those of teachers. In India, for instance, 40% of doctors and medical service providers are absent from work on a typical day (Muralidharan et al. 2011).

<sup>&</sup>lt;sup>27</sup> The following anecdote from this seminal study is illustrative: "When the investigators reached the primary school in Jotri Peepal shortly after noon, no teacher was in sight. One teacher, who had apparently left for lunch, soon appeared. He said that the school actually had three teachers, but that the headmaster and another teacher had gone elsewhere on official duty. The villagers contradicted this story. They said that the two absconding teachers did not turn up at all. The only one who did was the one the investigators had met... He too was highly irregular and opened the school at will" (PROBE Team 1999: 63).

<sup>&</sup>lt;sup>28</sup> Moreover, only about half the teachers were actively engaged in teaching at the time of the visit. This absence rate is second only to Uganda among the countries for which absence calculations based on a similar methodology are available (Chaudhury et al. 2004).

teacher absenteeism is not confined to a few bad apples, but is fairly widespread among teachers across age, gender, seniority, and pay grade,<sup>29</sup> in public and private schools alike (Duflo & Hanna 2005; Chaudhury et al. 2004).<sup>30</sup> With teachers' salaries and training and learning materials taking up 80% of the total education budget (Tewari 2015), these absences are associated with an enormous waste of the Indian state's already meager financial outlays on education. Teacher absences in India have been shown to seriously undermine the quality of learning, especially because the absence of a teacher in a single-teacher school results in the closure of the school (Duflo & Hanna 2005). A number of studies have sought to assess ways to improve absence rates of service providers. These studies have consistently found that attempts to empower the local community to monitor teachers are not successful in reducing teacher absenteeism (Banerjee & Duflo 2006). We argue that one way to make sense of these findings is by reference to the castebased beliefs discussed earlier. The belief that children belonging to groups lower in the caste hierarchy are less worthy of education also leads to less censure of teacher absenteeism when the school is perceived to have low-caste as opposed to higher-caste beneficiaries. It is this hypothesis that we seek to test in this paper.

#### 6 Status Inequality and Teacher Absenteeism in India

We investigate our hypothesis in a series of two survey experiments. Is it the case, as we hypothesize, that there is a greater tolerance for problems in the implementation of social policy, such as teacher absenteeism, when these problems are seen to affect groups that are lower in the caste hierarchy? We test this by asking respondents in our survey experiments whether a teacher in a public school should be punished for abstenteeism. The independent variable is our experimental, randomized manipulation of the caste status of the intended beneficiaries of the public service: caste status is subtly signaled to the respondent in the survey by randomly varying the name of the beneficiary or the name of the neighborhood.<sup>31</sup> In particular, we attempt to assess respondents' degree of tolerance for inefficiencies in public goods provision as measured by a question that asks whether a low-level agent of the state (a public school teacher) should be punished for inadequate performance in his or her job. The dependent variable is respondents' evaluation of the teacher's behavior. Our hypothesis is that respondents will be more tolerant of inefficiencies in service delivery, as captured by a less negative evaluation of an absent teacher, when the intended beneficiaries are of lower-caste status.

The two survey experiments are broadly similar implementations of this strategy. Thus they replicate each other's findings, showing that they are robust to two survey instruments and samples: for Study 1, a small sample of elite, English-literate computer users who self-selected into an internet survey; for Study 2, a larger sample, representative of Delhi, who were interviewed by surveyors within a multitopic face-to-face survey.

<sup>&</sup>lt;sup>29</sup> Chaudhury et al. (2004) note that older teachers, more educated teachers, and head teachers are all paid more but are also more frequently absent; contract teachers are paid much less than regular teachers but have similar absence rates. Male teachers are significantly more absent than females.

<sup>&</sup>lt;sup>30</sup> A monthly monitoring of non-formal education centers run by a non-government organization in Udaipur over the course of a year showed average absence rates for teachers to be 36% (Duflo & Hanna 2005).

<sup>&</sup>lt;sup>31</sup> In this study we use a Brahmin surname to indicate higher-caste status and a Dalit surname to indicate lower-caste status of the perceived beneficiary.

Both studies prove consistent with our hypothesis: respondents in both samples judge the teacher less harshly, on average, when the intended beneficiary population is signaled to the respondent to be low caste.

# 7 Study 1: Elite, English-Literate Computer Users

# 7.1 Method

This survey was conducted over the internet using Amazon Mechanical Turk (MTurk), an online labor market for small "human intelligence tasks". MTurk is widely used in studies of judgment and decision-making in psychology and behavioral economics, is increasingly widely used in political science (Huff & Tingley 2015), and has recently been used to study attitudes towards caste in India (Charnysh et al. 2015; Deshpande & Spears 2016). The survey was conducted online among a sample of participants from India in October 2016. Each respondent was paid US\$0.10 for completing the survey. The median participant spent 278 seconds on the entire survey, from consent through demographic questions.

Each respondent was asked the following:

The following questions are about government services in a poor urban neighborhood. In this neighborhood, the average family is similar to the family of *Kunwar Rajesh Pratap Rathore*, who has an income of about 70 rupees per person per day, and who has studied up to the seventh standard. About 70% of families are rich enough to own a pressure cooker. The growth of half of the children is stunted.

In the government primary school of *Kunwar Rajesh Pratap Rathore*'s village, the teacher was supposed to teach class on 20 days last month. In fact, the teacher only came to school and taught on 18 of the 20 days; he skipped work on two of the assigned days.

Which of these statements do you most agree with?

- Such things happen; this is not such a bad thing.
- This is a very bad thing.
- This is a very bad thing; the teacher's salary should be cut.
- This is a very bad thing; the teacher should be fired.

We included other socioeconomic information on the intended beneficiaries (income, asset ownership, human development, education) in order to hold constant any inference the respondents may make about the intended beneficiaries across experimental conditions. This question always appeared first in the survey. Other questions, such as whether police officers should be more willing to protect men than women, were included in the survey for separate research projects and always appeared after this question. The survey concluded with simple demographic questions about the respondent. Caste status was indicated subtly by randomly varying the italicized name in the text (it was obviously not italicized in the in-person survey experiment). In all other ways, the same survey was presented to all respondents. One name, implying a caste status, was presented to each participant. The names used were identical to those used by Deshpande and Spears (2016), who verified that these names connote caste status to the population of Indian MTurk users in a separate manipulation check. The names are listed in appendix section A.

As a separate experimental treatment, the teacher in the story was randomly assigned to have taught either 18 of 20 days (missing two) or eight of 20 (missing 12). Thus each respondent was randomly assigned to one of two caste statuses and one of two attendance records.

The MTurk software was set to only allow respondents within India, and to only allow each respondent to complete the survey once, both enforced by computer IP address and MTurk account (which is connected to a bank account).<sup>32</sup> Note that Study 1 participants are therefore, by design, relatively elite members of the so-called middle class: English-using, computer-using, formally banked, and typically urban. The summary statistics in Table 1 confirm this expected property of our participant pool.

# 7.2 Results

In Study 1, for each of the two attendance levels (absent two days or absent 12), respondents judged the teacher's absence less harshly, on average, when the intended beneficiaries were low caste. We quantify this in two ways: by dichotomizing the responses as with punishment and without punishment, and by assigning numbers one to four to the responses as a robustness check. Figure 2 presents these results.

To verify the statistical significance of these results and to permit further robustness tests, Table 2 presents these results as regression estimates. Columns 2 and 4 add regression controls for observed properties of the respondents. Because the treatment was randomly assigned, we would not expect these demographic controls to change the treatment coefficients, and indeed they do not. Although not reported in the table, we further tested whether the caste status of the beneficiaries statistically significantly interacted with the severity of the teacher's absences; as suggested visually by Figure 2, there is no interaction.

<sup>&</sup>lt;sup>32</sup> Following the recommendations for internet-based survey experiments of Oppenheimer et al. (2009), the sample was further restricted with the following instructional manipulation check after consent to participate: "In this study, we are collecting information about workers on MTurk who we may ask to participate in follow-up surveys. Please answer all questions carefully and truthfully. Your survey answers are important to our research. To show that you read these instructions carefully, do not type the word yes below, but instead type the first word in this paragraph. Remember, your participation is voluntary. Please type the word yes to indicate that you are ready to proceed." Participants were included who wrote "in", "In", or "IN".

# 8 Study 2: A Representative Sample of the National Capital City

# 8.1 Method

Study 2 was designed to complement Study 1 by surveying a larger and more representative sample. We added a survey experiment to a broader-purpose political science survey conducted in Delhi in January and February 2016. The survey had 1,200 respondents, who were sampled in a stratified sampling strategy.<sup>33</sup> Field interviewers and survey staff were not informed of the purposes or hypothesis of our survey experiment.

To make it feasible to incorporate the experiment into a larger-purpose, paper-based, in-person survey, the randomized treatments were simplified to two conditions: only two caste names were used, and the teacher was always said to have missed 10 of 20 days. The question was as follows, preserving the same answer options as in Study 1:

The following questions are about government services in an urban neighborhood. In this neighborhood, the average family is similar to the family of [*Vishnu Kumar Shastri*/Bhimrao Valmiki], who has an income of about 70 rupees per person per day, and has studied up to the seventh standard. About 70% of families are able to afford a pressure cooker.

In the government primary school of [*Vishnu Kumar Shastri*/Bhimrao Valmiki]'s village, the teacher was supposed to teach class on 20 days last month. In fact, the teacher only came to school and taught on 10 of the 20 days; he skipped work on half of the assigned days.

Which of these statements do you most agree with?

- 1. This is totally okay.
- 2. Such things happen; this is not such a bad thing.
- 3. This is a bad thing; the teacher's salary should be cut.
- 4. This is a very bad thing; the teacher should be fired.

Names were not italicized in the script read by in-person interviewers. Again, we included socioeconomic information in the prompt so that it would be held constant across experimental treatments.

Table 3 presents statistics descriptive of the Study 2 sample, overall and as divided by the two experimental conditions. These descriptive statistics confirm that Study 2's sampling strategy succeeded in two ways. First, relative to Study 1, it achieved a more representative sample, whose participants were less likely to be male and were of lower socioeconomic status (as indicated by

<sup>&</sup>lt;sup>33</sup> First, four strata were purposively selected in each of north, south, east, and west Delhi. Then, within each stratum, respondents were selected according to an in-field randomization process of attempting to interview every fifth household, a procedure designed to resemble that of the widely cited Annual Status of Education Reports of the Pratham Education Foundation (2005, 2016).

educational background). Second, the randomization of the experimental treatment appears to have balanced respondents on observable characteristics.

### 8.2 Results

The main result of Study 2 replicates that of Study 1: respondents judged the teacher's absence less harshly and were less likely to recommend punishment when the intended beneficiaries were randomly assigned to be low caste rather than high caste. Because Study 2 offers a large sample of the general population of Delhi, we are also able to conduct an *ex post* test of a statistical interaction: the effect of the beneficiaries' caste status interacts with the age of the respondent, such that older participants are more sensitive to the beneficiaries' caste status.

Figure 3 presents these results graphically, and Table 4 verifies their statistical significance and robustness in a regression framework. Column 1 confirms the statistical significance of the difference in means between the two experimental treatment groups: participants are about five percentage points less likely to recommend that the teacher be punished when the intended beneficiaries are low rather than high caste. Column 2 shows that the result is unchanged with regression controls about respondents, which is expected because the treatment was randomly assigned. Finally, column 3 shows that respondent age interacts with the experimental treatment at a p < 0.1 level; further research could investigate whether this result is an *age* effect that is likely to continue in future populations, or a *cohort* effect such that future populations can be expected to answer survey questions such as this with less discrimination than today's cohort.

One important question for further research is how these effects of the caste status of *beneficiaries* interacts with the caste status of the experiment *respondents*. One of the most controversial topics within the scholarship on caste is whether lower castes internalize a belief in the rightness of the caste hierarchy. Ambedkar himself singled out the internalization of a diminishing sense of self-esteem on the part of lower castes as one of the key features of Brahminical hegemony (Zene 2013: 89). The proposition that persons born very low in the caste hierarchy deeply internalize this hierarchy is, however, most prominently associated with Louis Dumont. In *Homo Hierarchicus* Dumont (1970) argued that lower castes subscribed to the caste system because it gave them a relative sense of social superiority over other caste groups immediately below them on a scale of continuous hierarchy (Zene 2013). This position has been actively criticized by scholars such as Béteille (1991). However, as discussed in appendix B, our study was neither designed nor powered to test for this interaction. Another question for further research, which we are not able to examine in our study, is how these effects of the caste status of beneficiaries might interact with the caste status of the teacher.

#### 9 Conclusion

This article seeks to advance the growing scholarship on how ethnic inequality can dampen the provision of public goods. On the one hand, it pushes beyond a conceptualization of inequality in purely economic terms to focus on inequalities of status between ethnic groups. On other hand, it moves away from the provision of social services—conceptualized, for example, through budgetary allocations (Baldwin & Huber 2010)—to their effective functioning. One of the most serious challenges to the effective functioning of social services is the absenteeism of service providers. No matter how much states spend on social services, no matter how many schools and hospitals they build, these are of little use if doctors and teachers do not show up to work. In this paper we provide experimental evidence that in a situation of status inequality between ethnic

groups, people are more likely to be more tolerant of absenteeism of service providers when the beneficiaries are perceived to belong to low-status ethnic groups. We draw on existing scholarship to explain this finding in terms of differences in popular beliefs about levels of appropriateness or deservingness of public goods among individuals depending on the status of the ethnic group to which they belong.

It is important, however, to discuss potential concerns about our findings in conclusion. A primary concern is the extent to which our findings are generalizable beyond India. To put it another way, are our findings about how status inequality might dampen public goods provision limited to an operationalization of status in terms of caste, and of public goods provision in terms of education? As described in the paper, the status hierarchy of caste is associated with an occupational division of labor. A fundamental division between "twice-born" and non-twice born castes is between those who work with their minds and rule, and those who work with their hands and are ruled (Weiner 1991). The content of the status hierarchy in India itself places a differential value on the provision of public goods, especially education, for higher and lower castes. Could it then be that the lower priority placed on the provision and functioning of public goods is driven by the specific association in India of lower-status ethnic groups with laboring occupations not seen as requiring an education? Relatedly, could our findings be peculiar to education insofar as it is, both in the Indian context and also more broadly, a public good that is used to actively maintain status distinctions?

While these questions remain open for future research, there is some evidence in support of the generalizability of the argument from the lack of prioritization of social welfare in the US. A number of scholars have pointed to the striking similarities between the caste system in India and race relations in the US, with Warner (1936) describing African Americans in the Deep South as virtually an "untouchable" caste, and Alexander (2010) referring to the mass incarceration of African Americans as having created a "racial caste system".<sup>34</sup> A large and influential scholarship points to how, especially since the 1960s, political elites have placed a low priority on social welfare because it is seen to benefit lower-status African Americans. Despite their formally equal status, Africans Americans were de facto blocked from the core New Deal social security programs of old-age and unemployment insurance through the exclusion of agricultural workers and domestic servants, who were predominantly black men and women. After the landmark Civil Rights Act of 1964 made such exclusion impossible, political support for social welfare programs plummeted. This was because, even when they were not targeted at blacks but at the poor-both black and white-welfare programs such as the "War on Poverty" came to be associated with blacks, who were seen as "undeserving" of social services.<sup>35</sup> From the 1960s onwards, the number of poor whites in the US has exceeded the number of poor blacks, and at least as many whites as blacks have availed themselves of social benefits. Yet poverty has come to be seen as a "black problem", and anti-poverty programs have been opposed and demonized because they are seen to primarily benefit this low-status ethnic group.<sup>36</sup> This lies at the core of the meager social welfare services in

<sup>&</sup>lt;sup>34</sup> An obvious difference, however, is that there is no way in which the racial hierarchy of the US has been associated with the occupational division of labor of the Indian caste system.

<sup>&</sup>lt;sup>35</sup> Gilens (1999: 154) notes the critical role played by the national news media, whose portrayal of poverty "darkened" dramatically and became more critical beginning in 1965, even though the racial composition of the American poor remained constant.

<sup>&</sup>lt;sup>36</sup> Evidence that opposition to public-assistance policies stems more from the association with lower-status groups as their primary beneficiaries—rather than from Americans' belief in laissez-faire individualism and a general aversion to state intervention—is brought out by the far lower levels of popular hostility towards social insurance programs. The most important social insurance program, old-age insurance, is not opposed, because unlike public-assistance

the US in comparison with other parts of the advanced industrialized world such as Canada and Western Europe, which are not characterized by such stark distinctions of status between ethnic groups (Weir et al. 1988; Lieberman 2005).

### A Caste Names Used in Study 1

Study 1 uses the following caste names, which were verified in a manipulation check by Deshpande and Spears (2016).

Low caste	High caste
Amit Jatav	Akhilesh Sharma
Ashok Mochi	Ishan Chaturvedi
Bhimrao Valmiki	Ishwar Pandit
Hiraman Chamar	Kunwar Rajesh Pratap
Nathu Valmiki	Mahesh Pandit
Om Prakash Chamar	Vishnu Shankar Shastr
Sukhiya Mochi	Ved Pratap Chaturvedi

# B Study 2 is Not Powered to Detect Results by Respondent Caste Subsamples

Figure A1 presents means and confidence intervals from Study 2 by respondents' caste categories, according to their self-reports. Our experiment was designed to be powered to identify a treatment effect in the full sample; it was not designed to have the statistical power to identify subgroup effects. This is visible in the large width of the confidence intervals of the subsamples, relative to the width for the full sample. The clear consequence is that we cannot conclude that the treatment effect is different for any subsample than for the full sample—indeed, the pattern is similar for the three large reported caste groups. However, we also cannot conclude that the effects are precisely similar across subgroups, due to the large confidence intervals.

programs, it does not raise the prospect of the use of the high-status whites' tax dollars to assist lower-status African Americans. See Clawson (2002) and Gilens (2003).

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