Friends or Rivals? Social Capital and Upward Mobility in Colonial Schools *

Cyril Thomson†

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Abstract

How do ties with elite peers affect the social mobility of non-elites who have historically faced social exclusion? Using novel data on high school and university graduates in five colonial Indian provinces between 1894 and 1921, I examine the effects of elite peers, defined as upper-caste students, on non-elites in high schools and colleges. Exploiting the plausibly random variation in the share of elite peers across all graduating cohorts within the same schools, I find that exposure to more elite peers reduces the probability that non-elite graduates, particularly those from merchant castes, complete university or become lawyers. These effects are driven by social rank rather than economic differences between elites and non-elites. The negative effect is strongest in private schools run by local Indian elites and among college students graduating with the highest grades in their high school examinations. Overall, the results suggest that exposure to elite peers in settings with significant social distance between elites and non-elites may hinder rather than foster upward mobility among non-elites.

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†ORCID Number - 0000-0003-4874-137X

1 Introduction

What is the effect of social capital – connections with elite peers – on the intergenerational mobility of non-elites? Recent work by Chetty et al. (2022) and Cattan et al. (2023) find positive effects of having ties with elite peers on the probability that non-elites secure better jobs or graduate from university. In their work, elite status is defined either by wealth or parental education. However, in many societies, elite status is shaped by historical and religious factors [1], leading to the social exclusion of non-elites. Thus, the divide between elites and non-elites is not just economic, but is rooted in social hierarchies with little and sometimes hostile interactions between the two groups. Akerlof (1997)'s theory of social distance suggests that such divides reduce positive interactions and knowledge sharing between elites and non-elites, limiting opportunities for upward mobility of non-elites. This context raises two questions. Does connections with elite peers generate positive or negative effects on upward mobility of non-elites? Can non-elites achieve better socioeconomic outcomes by being placed in elite schools or colleges where they are exposed to more elite-dominated cohorts?

To address these questions, I study the effects of elite peers on non-elite students in high schools and colleges across five provinces in colonial India between 1894 and 1921. Specifically, I examine the effect of exposure to a higher share of elite peers on the probability that a non-elite high school (or college) graduate passes university or becomes a lower-grade lawyer. Both university graduation and a legal career were associated with great prestige at the time, offering Indians a pathway into colonial administration. Elite status in the Indian subcontinent was historically determined by the caste system - a hierarchical social order based on ritual rank [2]. Under this system, individuals were divided into 4 broad groups (*varnas*), each comprising of hundreds of castes. Brahmins (priests) were at the top, followed by Kshattriyas (soldiers), Vaishyas (merchants) and Shudras

[1] For example, race in the US, clergy in medieval Europe or the Ulema in the Ottoman empire.

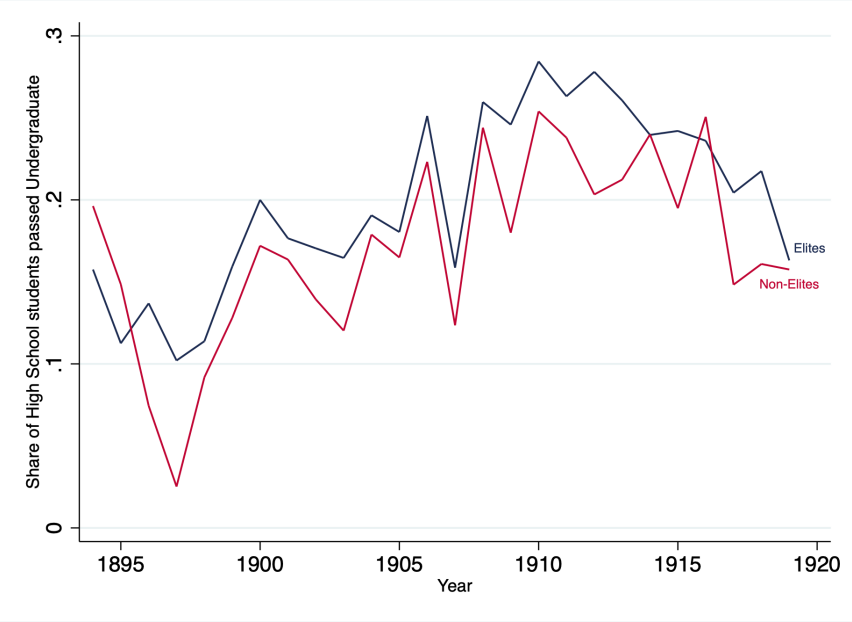
[2] Each caste represented a traditional occupation. These occupations determined the 'purity' of individuals. More 'pure' the caste, the higher their rank. See section 2.1 for more details

(artisans and peasants). Outside of these four varnas, were the Dalit castes ('untouchables' or 'out-castes') who were socially marginalized due to their traditional occupations being considered as 'impure'.

The Brahmin and Kshattriya castes were the traditional elites, holding considerable power in administration, and controlled access to land and education. They comprised close to 65 percent of high school graduates in the provinces under study between 1894 and 1919. Meanwhile the Vaishyas, benefiting from colonial trade, were a middle class group that increasingly sought higher education and occupational mobility. However, Shudras and Dalits were largely confined to the lowest rungs of society as peasants and labourers. Throughout the paper, I will refer to the Brahmins and Kshattriyas as elites and Vaishyas, Shudras and Dalits as non-elites, on the basis of their traditional roles. Beginning from 1894, as the number of high schools shot up, the number of non-elite high school graduates increased from 107 in 1894 to 641 in 1919. However, the share of non-elite high school graduates who proceeded to complete a bachelors' degree was consistently lower than that of elite high school graduates in almost every cohort (see Figure 1).

The effect of exposure to more elite peers in schools is ambiguous. Theoretically, the impact depends on whether interactions between elites and non-elites in schools can reduce the social distance - prejudice and stereotypes - between individuals (Akerlof 1997). Due to their caste rank, students from different castes were socially distant from each other, either due to limited interactions before entering schools or due to discrimination. In a gravity-type model as in Akerlof (1997), social distance reduces positive exchanges between agents leading to cliquish or conformist behaviour among elites and non-elites. This results in almost no transfer of helpful information regarding elite jobs or higher education opportunities from elites to non-elites. With the introduction of secular schools, elites and non-elites were forced to share the same spaces. If presence of non-elites leads to greater familiarity between each other, social distance between both will reduce, and the interactions will give non-elites access to the asymmetric information elites hold regarding jobs or higher education opportunities. This would support the contact hypothesis

Figure 1: Share of Elite and Non-Elite High School Graduates who received a Bachelors Degree



Notes: The figure depicts the share of elite (black line) and non-elite caste (red line) high school graduates who completed their bachelors degree. Year refers to the year of high school graduation or the high school graduating cohort.

where inter-group contact reduces prejudice between disparate groups (Allport 1954). However, as Allport notes, the contact hypothesis holds true only in the presence of inter-group cooperation. Cooperation may be limited in schools, where everyone is competing to obtain a high enough rank to enter university. Furthermore, presence of non-elites could provoke social backlash such as boycotts for example [3], further increasing the social distance between elites and non-elites and leading to negative outcomes for the non-elites.

Colonial schools provide a useful setting to study the effects of elite peers. Firstly, these schools aimed to prepare students for the university entrance exam or to become civil servants or lawyers in the colonial administration. Religious education took a backseat even in missionary schools, since government aid was conditional on schools following the syllabus prescribed by the government. Secondly, despite its secular nature, these schools were very elite-dominated. Over 65 percent of

[3] see Section 2.3 for more details

high school graduates were from elite castes, while only 15 percent were non-elites (the rest were Muslim or from other minority religions). This allows me to address whether non-elites benefit from attending elite-dominated schools. Additionally, the caste system is a unique setting that allows to test for the heterogenous effects of connections with elite peers, given the continuous ranking of castes. In particular, I study whether elite peers have different effects for the middle-ranking castes, such as the non-elite Vaishyas (merchants) compared to those lower in the caste hierarchy, such as Shudra and Dalits (artisans and peasants). Finally, since each caste is associated with a hereditary occupation, it provides a suitable proxy for parental occupation, allowing for the analysis of the effects of elite peers on social mobility.

To study these effects, I use a novel dataset that I collect by hand and construct from the provincial government gazettes. These gazettes published the list of high school and college graduates, as well as those who passed the lower-grade lawyer examinations for each year. I digitized these records which comprised 37408 high school graduates across 285 high school across 5 provinces between 1894 and 1919. The five provinces studied are *United Provinces*, *Central Provinces* and *Ajmer-Mewar* that came under the direct rule of the British and *Central India* and *Rajputana* that comprised of princely states that were under the indirect rule of the British. Crucially, the gazette published the caste of the students, enabling me to identify their elite status. I then linked these high school graduates to their outcomes in the intermediate (written 2 years after entering university) and undergraduate examinations, and identify whether or not they became a lower-grade lawyer. While income data is unavailable for this period, I argue that higher educational and occupational outcomes are a suitable measure for upward mobility in this setting. Since caste is associated with both a social rank and a traditional occupation, examining whether exposure to more elite peers increases the likelihood of non-elites to complete higher education or obtain white-collar jobs, is analogous to asking whether graduates from trading, agrarian or artisanal backgrounds were able to break into more prestigious fields.

Using this linked dataset, I conduct the analysis in two parts. In the first, I study the effect

of having a higher share of elite peers on the probability that a non-elite high school graduate within the same school-cohort passes university examinations or becomes a lower-grade lawyer. For identification, I follow the approach of Hoxby and Weingarth (2005), exploiting the plausibly random variation in the share of elite peers within the same school across cohorts, controlling for linear trends within schools. I find that a higher share of elite peers within the school-cohort has a negative effect on the probability that a non-elite high school graduate passes university or becomes a lower-grade lawyer, with the effect primarily driven by the merchant castes. In the second part of the analysis, using a similar empirical strategy, I find that non-elites exposed to a higher share of elite peers in colleges were also less likely to obtain an undergraduate degree, with these effects again driven by the merchant castes

I perform several heterogeneity analyses to identify mechanisms that explains the results. First, I examine whether the results are driven by caste rank or the socioeconomic background of non-elites by restricting the sample to high school graduates coming from merchant castes in the United Provinces. I then exploit the variation in ranking among the different merchant castes. I find that the effect of elite peers is more negative for the lower-ranked merchant caste students, relative to their higher-ranked merchant caste peers. This suggests that elites cared more about their differences in caste rank than by their occupational backgrounds. Furthermore, I show that the negative effects are most pronounced for merchant caste students attending high schools in districts where merchants acquired more land, suggesting backlash by the traditional elites against rise of a class of elites comprising the merchant castes.

I also find that the negative effects of elite peers on merchant caste high school students is greatest in privately managed schools, run by the local Indian elites, compared to government-run schools. This supports historical evidence documented in government reports that implied private schools were unable to create conditions for better integration between different castes compared to government schools. Finally, I find that in intermediate colleges, the negative and statistically significant effects of elite peers was concentrated among non-elite graduates who passed with the

highest class of grades in high school [4]. This suggests that high-ability non-elites faced elites that exhibited cliquish or exclusionary behaviour that acted as an obstacle in their chances to complete and obtain an undergraduate degree.

1.1 Related Literature

This paper contributes to two main strands of the literature. Firstly, it relates to a rich literature studying peer effects (see Sacerdote 2011 for a review), particularly the effects of elite peers on social mobility. Much of the existing literature defines elite peers by economic status. Recent work by Chetty et al. (2022), Bertoni et al. (2017), and Cattan et al. (2023) defines elites by parental wealth and education, finding positive effects of elite peers on the earnings and higher education of non-elites. In contrast, Michelman et al. (2022) defines elite status based on the high school background of students and finds that non-elite college students entering Harvard between 1919 and 1935 did not benefit from interactions with elite students. Moreover, their findings show that elites exhibit cliquish behavior, where elite students primarily benefited from interactions with peers from similar backgrounds. These findings suggest that social elites may influence non-elites differently than economic elites. This paper provides further evidence on the impact of social elites. Specifically, I find that elite peers negatively affect the probability of non-elites completing higher education or attaining prestigious white-collar jobs. Exploiting the social ranking of castes with the same occupation, I show that these negative effects are primarily driven by differences in social rank rather than occupational background.

A significant portion of the peer effects literature focuses on the effects of peers defined by gender and race. Similar to Lavy and Schlosser (2011), who study the effects of female peers at different stages of schooling on academic performance, I examine the effects of elite peers at both high school and college levels. Peer effects based on race have been explored by Hoxby (2000) and

[4] Students were divided into first, second and third division based on the grades/marks they obtained in the high school examination. Highest refers to first and second division which was the honours grades

Hoxby and Weingarth (2005), but these studies typically focus on short-term academic outcomes rather than long-term outcomes like intergenerational mobility. In this paper, I define peers by caste — a social hierarchy that assigns a hereditary social rank and traditional occupation across generations. Unlike economic elites, whose status can change with wealth, caste is defined at birth and does not change. Moreover, caste differs from race and gender in that it not only assigns a social rank but it is also associated with a hereditary occupation.

A related literature explores the effects of elite colleges on the social mobility of non-elites. Dale and Krueger (2002) finds that elite college attendance increases future earnings for students from low-income families. However, Zimmerman (2019) finds that admission to elite colleges primarily benefits students from elite private high schools. Recent work by Chetty et al. (2023) and Jia and Li (2021) highlights a positive role of elite colleges in raising upward mobility by providing access to elite networks and resources for non-elites. This paper shows that the effects of elite schools and colleges are more ambiguous in settings lacking safeguards against discrimination. The negative effects on non-elites were most pronounced in schools managed by local Indian elites, where cohorts were more elite-dominated than in any other type of schools. In settings where elites are historically entrenched, it is more challenging to obtain positive interactions between elites and non-elites.

Secondly, this paper contributes to the literature on the effects of colonization on education (see Chaudhary 2015 for a review). Much of this literature examines the distribution of primary schools during the colonial period using district-level or aggregate data. For instance, Chaudhary (2009) and Chaudhary (2010) show how caste diversity and the landed elite reduced the supply of primary schools in colonial India. Halder (2021) studies social mobility in Bengal using college registers beginning from the colonial period. In Africa, significant research has explored the short- and long-run effects of colonial education. For example, Huillery (2009) finds that colonial investments in education have enduring effects on outcomes today, while Dupraz (2019) shows that differences in British and French pedagogical systems impacted long-term educational attainment. Wantchekon

et al. (2015) provides an additional channel of the persistent effect of colonial schools: intergenerational transmission of preferences for education across generations. A prominent feature of the colonial education system was the entry of missionary schools and evangelization. Cogneau and Moradi (2014) shows that favourable attitudes towards missionaries benefited those under the British part of Togoland, in contrast to the French part. In India, Castelló-Climent et al. (2018) finds persistent positive effects due to missionary schools.

This paper extends the existing literature on colonial education in several ways. Firstly, in contrast to these works, it makes use of novel data on individual-level records of high school and university students. To the best of my knowledge, this is the first paper to study the effect of elite peers on the social mobility of non-elites during the colonial period, as well as the intergenerational mobility of those who attended colonial schools. Furthermore, it addresses how elites reacted to the entry of non-elites into schools during the colonial period. Colonization introduced formal schooling across all stages and competitive examinations to obtain government jobs. This created new opportunities for non-elites to access higher education but also created the potential for elite backlash. Finally, in contrast to the existing literature, the majority of schools during this period were under the control of the colonial government or private Indian elites. The role of missionaries was limited, as the British were wary of giving missionaries free rein to convert. This implied that schooling had secular objectives, and schools differed only in their management, allowing for a clearer comparison of how elites interacted with non-elites across different types of schools.

The rest of the paper is structured as follows. In the next section, I describe the caste system and the education system during the colonial period. I then, describe the data used for the analysis and the empirical strategy to estimate the effects of elite peers. Finally, I present the results and conclude.

2 Historical Background

2.1 Caste and Caste System

All Indians were divided into 4 (+ 1) varnas, each of which were divided into hundreds of castes (see Figure 2). These were Brahmin (priest), Kshattriya (warrior/soldier), Vaishya (merchant) and Shudra (artisan, peasant or service castes). Outside these four varnas were the Dalits, who were referred to as 'untouchable' since they were associated with 'unclean' occupations [5]. A caste was hereditary and endogomaous [6]. Caste system was a social hierarchy based on 'ritual' rank, determined by aspects of ceremonial 'purity' and 'pollution'. It controlled all aspects of social and economic life. Inter-caste marriage was taboo [7], vegetarianism was associated with higher caste status and meat eating was considered impure [8], and social interactions were regulated [9].

Under the British, Brahmins and other upper castes dominated public administration and the land ownership. According to the 1911 census, in United Provinces, 28.5 percent of the non-European gazetted officers in the public force and administration were Brahmin, though they made up only 11.45 percent of the total population. In contrast, Kayasthas - an elite scribal caste comprised of 9.8 percent (1.5 percent of the total) and Agarwals - a Vaishya caste of traders - comprised 3.3 percent (0.63 percent). Brahmins also dominated other white-collar jobs. 33 percent of all doctors, teachers and lawyers were Brahmin (the next highest among the Hindu castes were Kayasthas

[5]For example, the *Bhangi* caste were traditionally sweepers, *Pasi* were toddy (palm wine) distillers/makers, *Chamars* were leather makers.

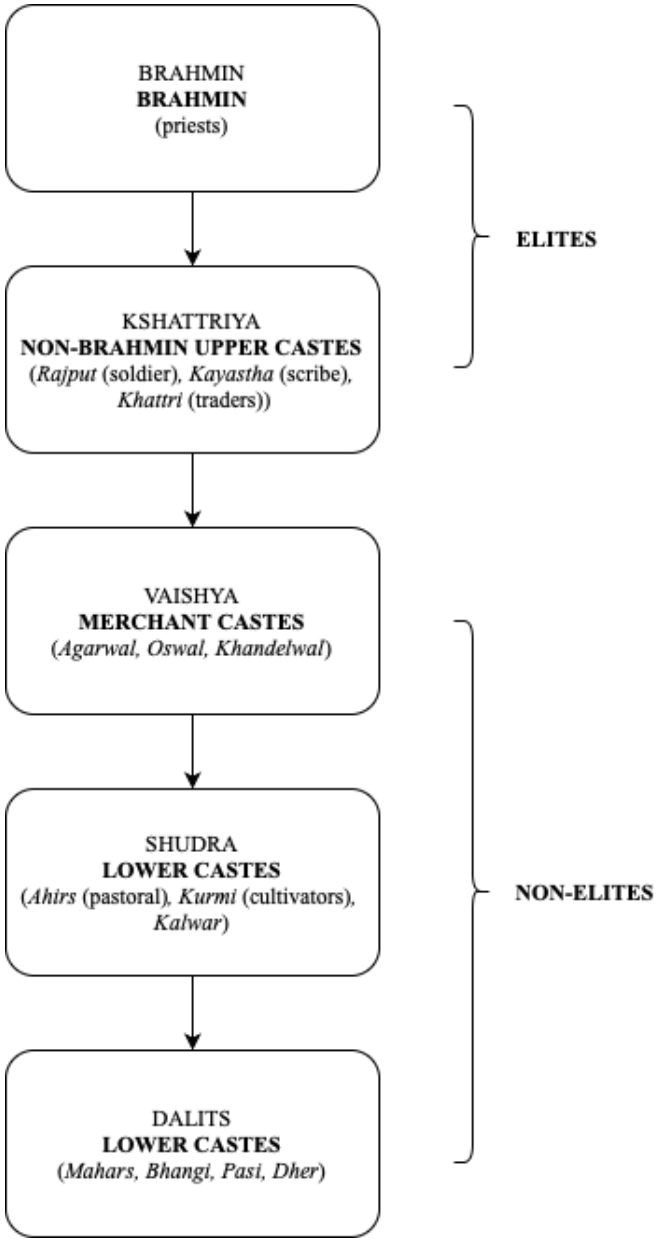
[6]Clark and Landes (2012) has shown the scarcity of inter-caste marriage was key to the low intergenerational mobility in India.

[7]Inter-caste marriage was simply forbidden. When social reformers attempted to revise this, they were met strong from the Hindu orthodoxy. Thus, under the British, inter-caste marriage was limited between a few castes and importantly, if they were to marry, they had to forego the Hindu religion. It was only with the passing of the Hindu Marriage Act post independence that inter-caste marriage within the Hindu religion was legally accepted.

[8]Brahmins, with some exceptions, followed a strictly vegetarian diet. Kshattriyas, on account of their status as soldiers, did eat meat. Castes that ate meat but not beef came next in the hierarchy, and finally castes that ate meat including beef came last in the caste hierarchy.

[9]Social interactions between castes were conditioned by concepts of purity. For example, members of castes involved in tanning, shoe-making, bamboo and canes, could only approach higher caste members at a particular distance Ghurye (1969). In his interview with Anil Bera for the Econometric Theory in 2003, statistician C.R. Rao (Bera 2003), recounted how lower caste members like him could not visit the houses of his Brahmin classmates and get water from them if thirsty.

Figure 2: Caste System



Notes: The figure depicts the caste system. Each box depicts a varna. The text in bold indicates how the varna will be referred to in the rest of the paper. The text in brackets below the bold text gives examples, used in the paper, of some castes for the corresponding varna. Curly brackets depicts the elite status of each varna.

who comprised 9.8 percent of the total). Among those who received incomes from rent on lands, Brahmins were 26.8 percent of the total, while Kayasthas were 5.5 percent. Majority of the castes below the Brahmin and Kayasthas kept at their traditional occupations. More than 70 percent of Agarwals (traders), lower castes such as Kurmi (cultivators) and Bhangi (sweepers) for example, continued with their traditional occupations. In contrast, only 7.8 percent of Brahmins and 32 percent of Kayasthas continued to work in their traditional occupations as priests and clerks/scribes respectively. Overall, the aggregate census records suggest very limited occupational mobility among the varnas and castes below the Brahmins and Kshattriyas, while the latter two continued to dominate the occupations associated with the pre-colonial elite as well as the new white-collar jobs that opened up with the arrival of the British.

In this paper, I define elite castes as those from Brahmin and Kshattriya castes since they traditionally monopolised administration and landownership. Non-elite castes are those below them in the varna ranking. These include the Vaishyas who had historically attempted to use their wealth and patronage to achieve higher social status, for example, by adopting Jainism [10]. The rest are Shudras and Dalits. These are castes who were traditionally artisans, weavers, peasants, barbers etc, who made up more than 70 percent of the population.

2.2 Education System in Colonial India

There was no compulsory education, and neither was it free at any stage in British India. A large proportion of the beneficiaries of education were the landowning class and a small but growing middle class that were mostly civil servants in the government, lawyers or traders [11]. Figure 3 depicts the different stages of schooling from the primary to university stages during the colonial

[10] see Gandhi (1977)

[11] In 1875, 53 percent of government school students in the United Provinces were children of landowners and cultivators, 15 percent were bankers and traders, 13 percent were professionals (civil servants, lawyers) and artisans, and 13 percent were labourers. The rest were children of priests. However, in high schools, the ratio was nearly reversed, with 48 percent of students having parents who were professionals and artisans, majority of whom were government civil servants.

period. An Indian boy or girl [12] would begin primary school at the age of 5 or 6. If they undergo the full cycle of schooling without dropping out, they would pass high school at the age of 16-18. The medium of instruction in primary schools was the vernacular (mothertongue). Middle schools taught either in the vernacular or English. Except for those from the United Provinces, students who attended the middle vernacular schools would have to repeat middle school in the English medium if they wanted to attend high school.

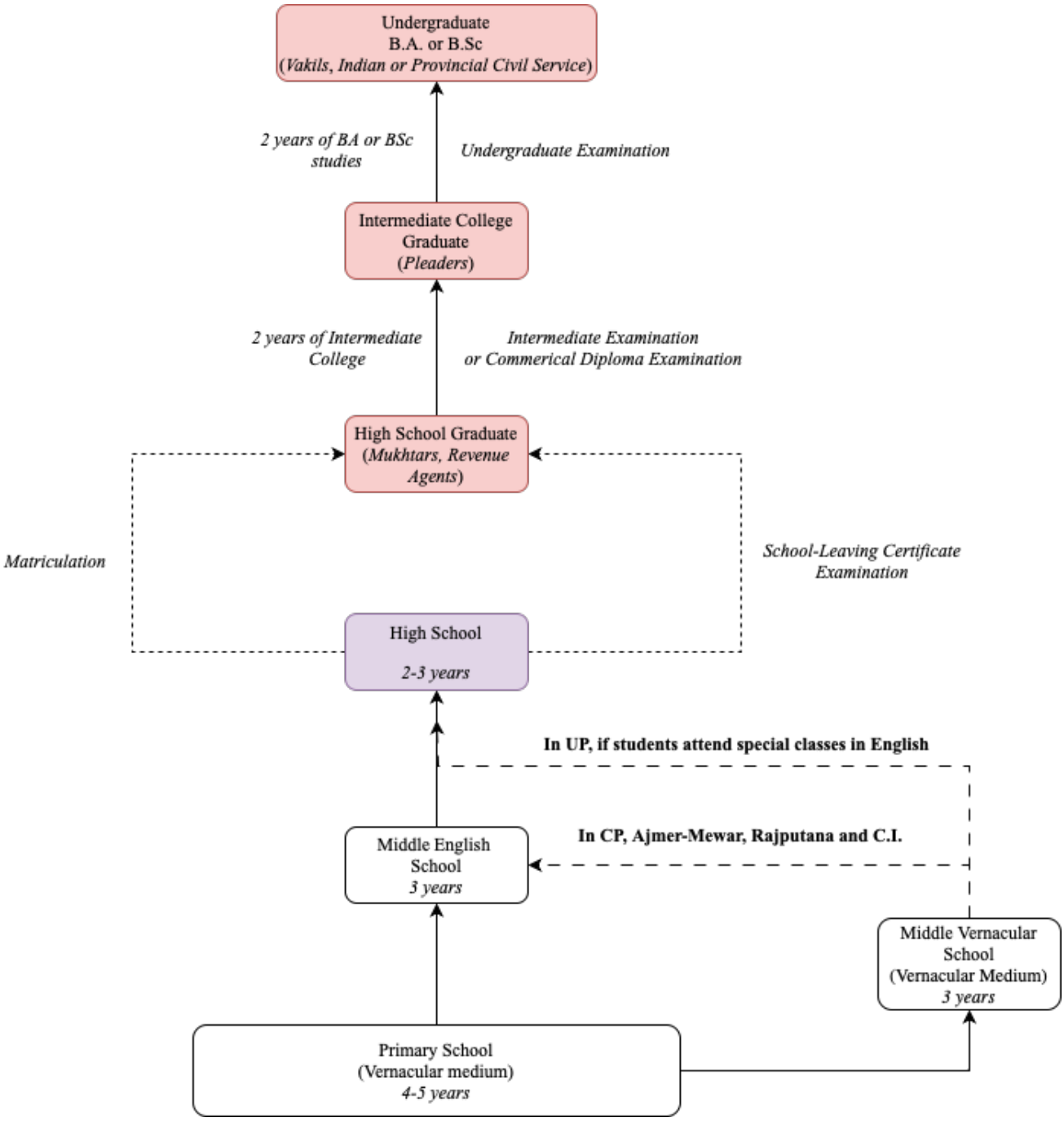
Students completed their high school within 2-3 years. To graduate high school and gain eligibility to enter university, students had to either write the matriculation examination - conducted by the University of Allahabad, or the school-leaving certificate examination - conducted by the provincial government of the United Provinces. All high schools prepared students for the former while some prepared them for the school-leaving certificate (SLC) examination as well. The latter was introduced at the turn of the twentieth century [13].

Until the late nineteenth century, matriculation was the only examination high school students could write to enter university. This implied that students across all high schools within the jurisdiction of the university took a common examination and followed a standardized curriculum. The University of Allahabad also oversaw collegiate education in five provinces: United Provinces (UP), Central Provinces (CP), Ajmer-Mewar, Central Indian Agency (CI), and Rajputana. Even when the UP government introduced the SLC examination, schools from the other provinces would also send students to take the SLC, as higher education remained under university control. Following the British system, the university functioned primarily as a supervisory body and certificate provider, with actual teaching occurring in the 43 colleges affiliated with it. Any high school

[12] Schools were gender-specific. In 1917, the total number of primary and secondary schools for boys was 11,166, while that for girls was 1,169, of which only 86 were secondary schools. There were 6 high schools for girls. There were none in the other 4 provinces. The number of boys and girls attending secondary schools was 86,466 and 969 respectively.

[13] The only difference between both was the greater focus in English training in the latter examination since the final examination in English had an oral component. The latter was reinstated in 1911, after its cancellation in 1907 since the first iteration of school-leaving certificate examination did not allow students to enter university. In 1915, the provincial government in UP made the school leaving certificate examination the sole criterion for many jobs in its service, leading to its increased demand and majority of the students in United Provinces shifted to it.

Figure 3: Stages of Schooling from Primary to Undergraduate



Notes: The figure is constructed based on the *Progress of Education 1902-07 Vol 1*. Each box corresponds to a particular stage of education beginning from primary school. The portion in Italics refers to the number of years it takes for a student to complete that particular stage of schooling. The box in purple indicates the final stage of schooling - high school. The boxes in red indicate those who are eligible to enter university either as a student in an intermediate college or in a college offering undergraduate studies. The portion in brackets in these boxes give example of some of the jobs that students with this level of education can obtain. The text beside the arrow connecting these boxes indicate the type of examination it takes to graduate a particular stage. For example, a high school student writes the matriculation or school-leaving certificate examination to become a High School graduate (Matriculate).

graduate was eligible to pick one among these colleges for their higher education.

Following a policy initiated in 1899 [14], it was mandated for the provincial government to run a 'model' high school in every district. Thus, majority of the districts under British rule had at least one high school, which was almost always located at the district centre. Figure 3 also depicts the pathways towards higher education and legal careers available for a high school student. All high school graduates were eligible to enter university, regardless of their rank in the high school exams. For those who did not enter university, one of the most reputed white-collar jobs was to become a lower-grade lawyer, either as a mukhtar (lawyers in the lower level subordinate courts), or a revenue agent (officers who dealt with land settlements). To qualify as one, candidates had to pass the respective mukhtarship or revenue agent examinations.

On entering university, graduates had to first undertake training for two years in an intermediate college. This is equivalent to the last two years of a present day high school [15]. On completion of the two years, they had to pass the intermediate examination. If they instead wanted to pursue higher studies in commerce, they took classes to pass the Commercial Diploma Examination [16]. Intermediate college graduates, were eligible to write the pleadership examination and become pleaders in courts. Those who chose to continue their studies trained for another two years before they wrote the undergraduate examination (either in Arts or Science) to earn a bachelors' degree. Undergraduates were eligible to become *vakils* (lawyers in the High Courts) [17] or pursue a law degree to become barristers. Higher grade lawyers and officers in the Indian or provincial civil services were some of the most prestigious white-collar jobs for Indians at the time. Although in theory, students could complete university within four years of their completion of high school,

[14] Progress of Education in India, Vol 1, 1902-07

[15] The present day education system in India is a successor of the colonial system. The colonial high school education was succeeded by secondary schools in post-independence India which teach up to grade 10. Grades 11 and 12, known as the senior secondary stage, succeeded the intermediate college. In post-independence India, students choose their stream of choice prior to entering grade 11 - Science, Arts or Commerce. In the colonial period, the intermediate college taught the same subjects to students interested in pursuing a Bachelors of Arts or Science.

[16] It was only introduced in United Provinces in 1913. For convenience, I call both groups of students who passed their first stage university exam as Intermediate Graduates

[17] High Courts were the highest stage of judiciary at the provincial leve.

it could sometimes take up to seven years for students to pass the intermediate examination. The delay was due to failure in their first attempt or simply due to some students entering university only a few years after their matriculation.

Finally, education was provided by both government and private organizations. Each province had its own education department which oversaw both running of schools and aiding private schools with financial assistance. Majority of the primary schools at the time were run directly by the municipal or district boards while the provincial government would setup at least one high school in every district centre. Private schools were managed by either Indians or missionaries. The former dominated in most provinces. Missionaries were usually the first to bring education, and English education, in particular. However, their spread was limited by the British, worried by any backlash by the Indian elite that would replicate the events surrounding the mutiny/first war of independence in 1857 (see Bellenoit 2007) [18]. Of the 285 high schools that sent graduates between 1894 and 1919, 70 were run by the provincial government (henceforth, referred to as government schools). 40 were run by the princely state and 47 were missionary schools. The rest were private schools run by the Indian elite.

2.3 Caste Relations in Colonial Schools

Colonial schools were based on the principle of secular education and were in theory, open to all castes. In practise, colonial schools had to face the realities of caste relations within the provinces under its control. While specific information on interactions between students, as well as with their teachers in schools, are absent, witness accounts provided by missionaries and government officials - Indian and British - gives some clues into how caste affected student relations in schools.

Firstly, caste affected the accessibility of schools to the general population. In his witness

[18] Bellenoit (2007) identifies missionaries had a bigger role in the relatively poor United Provinces, compared to the other Indian provinces. However, based on the data used in this paper, among the total number of high schools in the five provinces from which students graduated high school between 1894 and 1919, only 47 (28 in United Provinces) out of 285 (171) high schools were run by missionaries. Overall, 15.4 percent of the graduates were from missionary-run high schools.

statement to the United Provinces education commission in 1884, a subordinate judge in Agra, noted that *'the sweepers and chamars,..., are practically excluded from primary education. There is no rule prohibiting their admission into Government schools, but if they were, people of the higher orders would object to send their children to schools, where they would have to mix with them'*. Others accounts produced similar statements. In some cases, opposition to entry of lower caste students was far from benign. When a school in Bombay presidency [19] admitted low-caste students, aggressive action by upper castes led to the closure of 5-6 schools for years and the burning of crops and huts of low-castes in a village.

On the other hand, schools were not free of cost. Majority of the agrarian castes, who were peasants, were extremely poor. As one witness noted to the 1884 commission, many agrarian caste members were subsistence farmers whose entire livelihoods could be affected by a single season of drought. Children were expected to help in the cultivation of land.

Secondly, students from lower-ranked castes were subjected to discriminatory behaviour within classrooms, even if they were admitted. One statement [20] provided to the 1884 commission noted how *'on no account will the Brahman and Kshatrya sit on the same platform with the people of inferior castes, and this prevents children of the two classes from mixing together in the same hall'*. Evidence from other sources suggest similar treatment. In the 1909-10 report on education in the Central Provinces, it was reported that in Berar, *'although wherever there are Government or Board School buildings, Mahars are allowed to study inside the buildings, the masters frequently neglect them in favour of boys of better castes; while in schools held in private buildings, members of the untouchable castes are relegated to the verandahs.'*. The report suggests a higher degree of discrimination meted out to lower caste students admitted to private schools.

Part of this was exacerbated by the background of teachers. Majority of teachers were Brahmins or Kayasthas. This was a longstanding phenomenon. An 1852 report found that 91 percent

[19] Progress of Education 1897-02 Vol. 1

[20] This was given by the President of the Ghazipur Literary Association

of Hindu teachers in indigenous schools at the time were Brahmins and Kayasthas [21]. Even though they made up a significant portion of the student body, share of merchant caste teachers was less than 2 percent. The number of merchant caste students who passed the qualification to become teachers in the 171 high schools across United Provinces between 1902 and 1922 was only 48. [22].

Thirdly, demand for education itself was related with the hereditary occupation. It was highest among Brahmins, Kayasthas, Khattris and Vaishyas who traditionally held roles as priests, scribes and moneylenders or bankers. Children of shopkeepers, for example, who were usually from merchant castes, did not remain long in schools [23]. Here, the colonial government was partly to blame, as for a long time it did not maintain strict rules on qualifications required for hiring and preferred upper castes [24]. However, when possibilities to leave their traditional occupations presented itself to non-elites, their demand for education also grew. Among the lower castes, it was those who were employed in government service or in European homes [25] that were interested in English education.

I find some evidence supporting this for the merchant castes. Using land settlement reports available for 27 (out of 48) districts in United Provinces, I find that districts with a higher share of merchant caste landowners also had a higher share of high school graduates from the same castes (see Figure 4). Landowners were traditionally upper castes such as Rajputs or the Muslim elites, and the merchants were a new class of landowners. Districts with merchant castes diversifying into new occupations and opportunities saw greater share of merchant caste high school graduates. Prospects for occupational mobility was one of the factors that affected demand for education, beyond rudimentary learning.

[21] See H.S. Reid report, page 16.

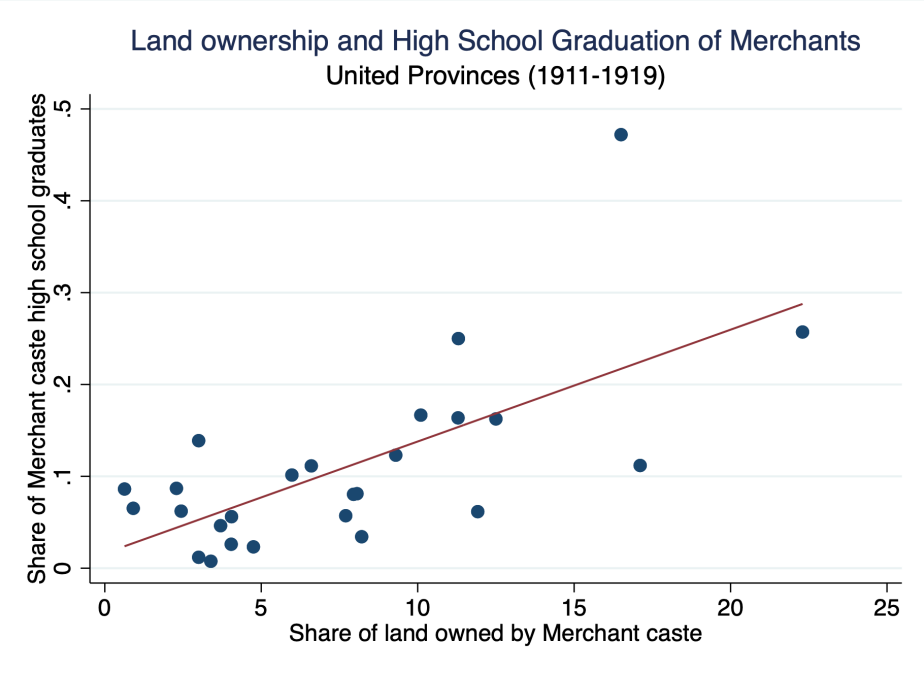
[22] This is based on my calculation from matching the lists of candidates who passed the Anglo-Vernacular Teachers' Certificate Examination from 1902-1922 with the list of high school graduates. In total there 450 high school graduates who passed this examination - 264 of these were Brahmins and Kayasthas, 36 were from other upper castes. 16 were from lower castes. 77 were Muslims and the rest were Jains and Christian natives.

[23] See the Report by the North-Western Provinces and Oudh Provincial Committee, page 150.

[24] See the Report by the North-Western Provinces and Oudh Provincial Committee, page 268.

[25] see the Report by the North-Western Provinces and Oudh Provincial Committee, pages 183, 255 and 257.

Figure 4: Relationship between Land Ownership and High School Graduation of Merchant castes in United Provinces



Notes: The figure depicts the correlation between percentage of district-wise land ownership by merchant castes (data of which were available for the districts from before 1910 and is obtained from the land settlement reports of the various districts) and the district-wise share of merchant caste high school graduates.

That said, evidence from government reports suggest that obstacles presented by upper castes towards lower castes played a far more important role. The 1909-10 report from Central Provinces says *'The higher castes have not only kept the low-castes out of Government schools, but they have prevented them from going to Mission schools. That the low castes are willing to attend schools is I think, proved by the fact that they flock so readily to the schools opened under the patronage of Brahmin gentlemen.'*. Furthermore, anecdotal evidence suggest that low castes were attracted to governments schools to obtain government jobs [26]

The government recognized the issues, in particular that of accessibility of lower castes to schools. In response, it opened primary schools in villages that catered specifically to lower castes (Chaudhary 2015). However, finding teachers and maintenance of these schools were costly. While

[26] see the Report by the North-Western Provinces and Oudh Provincial Committee, page 255. The witness, an inspector of schools in Oudh, actually calls the prospect of obtaining a government appointment an 'illusion' for lower castes.

the government provided scholarships, this entailed writing a scholarship examination where headmasters of their respective schools selected students to write this exam. Among the 93 candidates who received scholarship to attend high schools in 1910, 62.2 percent of the students were upper-caste. Around 20 percent were merchant castes but only 0.03 percent (3 students) of scholarship holders were lower caste [27]. These numbers, however, do suggest that a significant share of merchant caste students were able to obtain scholarships to attend high school.

3 Data

In this section, I describe the data on High School and University graduates that are used for the empirical analysis. I begin with the population of high school graduates from all high schools in the five provinces that came under the jurisdiction of University of Allahabad. I then link them with their higher education and legal career outcomes.

3.1 High School Graduates

Records of high school students that graduated via either the matriculation and the school leaving certification examinations were collected and digitized from the *Government Gazette of United Provinces of Agra and Oudh* [28]. Data for the analysis begins from 1894 [29] since this is the first year for which the the caste of the student is recorded. The data is digitized till 1919. The gazette was a weekly publication of the provincial government, divided into eight parts, containing important notices from the various government departments – such as changes in law, land sales, education, public works department and so on. For some years, due to poor quality of pages in the government gazette, the data for those passing the matriculation examination is obtained from the *Calendar of*

[27] This is calculated from the results of the High School Scholarship Examination published in the United Provinces Government Gazette for 1910, part 4.

[28] The results were notified 2-3 months after the examination was conducted in the gazette, usually between May-June

[29] University of Allahabad opened in 1889.

the University of Allahabad, an annual review of the university that recorded important decisions by the university syndicate, rules for all examinations it conducted, affiliated high schools and colleges, list of university graduates and so on.

Data on high school students (see Figure C.1) consists of the name and surname of the student, age at the time of examination, high school, grade/division (each passing student was classified as having passed in First, Second or Third class) and caste of the student. While the same data is available for other provinces, only the University of Allahabad and the Education department of the United Provinces recorded the caste of the student. This enables me to i) identify clearly the share of elite students in each graduating cohort and ii) identify those who were from non-elite castes. It is hard to identify accurately the exact caste of students in other provinces, especially from among those who are not Brahmin. Previous work looking at intergenerational mobility during this period such as Halder (2021) uses surnames to identify caste for university students in Bengal presidency. While surnames could be used to accurately Brahmin students in United Provinces and Central Provinces, it is hard to identify clearly the caste of students among the rest, since they did not usually have surnames unique to their caste. For example, the surname - Chaudhury - was used by members of all castes. Since the gazette and university calendar recorded the specific caste of the student, there is no concern in deterministically identifying the caste status of a student. Importantly, I can also differentiate clearly between students from middle-ranking and lower-ranking castes, which is less likely when using surnames.

In total, there were 39,208 candidates who passed either examination between 1894 and 1919, across 285 high schools. Of these, 1430 candidates were private, i.e., did not enter as candidates from a recognized high school [30]. Since I do not know their high school, these candidates are removed from the sample of analysis. Of the remaining candidates, 442 students (884 candidates) passed both the matriculation and school final examinations between 1911 and 1919. Over 50 percent of them attended schools in Agra and Allahabad, and all were from the United Provinces.

[30]The graduate records only give information on the district they are coming from.

Since the baseline regression uses graduating cohorts at the high school level and to avoid double-counting, I exclude the school final examination records of these students from the sample. This leaves us with 37208 high school graduates.

Finally, given the caste system was directly applicable to Hindus [31], I restrict the sample to Hindu high school graduates. Thus, the final sample of analysis consists of 29874 high school graduates. Of these, over 67 percent of the students (20053) passed high school writing the matriculation examination.

Identifying Elite Status - I classify the caste/religion status recorded in the data into 6 groups – Brahmin (rank 1 varna), Non-Brahmin Upper Castes (rank 2 (Kshattriya) varna), Vaishya or Merchant castes (rank 3 varna), middle and lower castes (Shudras and those from Dalit castes), Muslim and Others (Native Christians, Europeans, Sikh, Parsi, Jew etc.). Caste was recorded for Hindus clearly. For Muslims, there were clear social divisions based on whether they had converted from upper caste (Sheikhs, Saiyids) or lower caste. However, this information is not consistently provided in the graduates data. Hence, I don't classify Muslims as elite or non-elite, and all analysis is performed on the sample of Hindu graduates.

For the Hindus, I classify their castes into 4 groups based on the social precedence table recorded in the census of 1901. For each province, a separate table was made to incorporate castes unique to the respective provinces. These tables, has been previously used in Agte and Bernhardt (2023), for Central India, to study adherence and persistence of caste norms. While there were not many issues in the assignment of castes to each varna [32], rankings of castes within each varna was controversial [33]. For consistency, I use the varnas to identify elite status. The appendix (see Section C.2) details the classification procedure to assign castes to the four varnas.

[31] Among Muslims, there were were different elite classes such as the *Saiyids*, *Pathans*, *Sheikhs* and so on. However, the high school records do not classify Muslims by their social division and hence, I am unable to classify Muslims as elite or not.

[32] A few castes were assigned to varnas that would be contrary to their traditional occupations. One such case were the Khattri, a merchant caste, which in 1901 census was placed among the other upper castes below Brahmins.

[33] see Fuller (2017)

In the baseline regression, an elite student is a student that comes from a caste placed in the Brahmin or Non-Brahmin Upper Caste groups. Non-elites are those from the Vaishya, Shudra and Dalit castes. Around 81 percent (65 percent of the total graduates) of Hindu graduates were either Brahmin or from other non-Brahmin upper castes. Just over 14 percent of Hindus were from the merchant castes, while the share of Hindus from lower castes was 4.2 percent. 16.4 percent of the graduates were Muslims, while students from other religions (Native and European Christians, Parsi, Jain etc.) made up 3.7 percent of the total. The total number of students by each varna, thus, closely resembled their respective rank in the hierarchy, with the total number of upper caste graduates far eclipsing the rest (see Figure B.6). Thus, as per the definition above, 65 percent are classified as 'Elite' and 15 percent were classified as 'Non-Elite'. Of the 221 castes that high school graduates came from, two castes - Brahmins (priests) and Kayastha (scribes) - comprised 53.2 percent of the total number of graduates.

3.2 Outcome Variables

I study the effects of exposure to a higher share of elite peers on the probability that a non-elite student would achieve one of three outcomes after completing high school - pass the intermediate examination, pass the undergraduate examination or becomes a lower-grade lawyer (mukhtar, revenue agent). Of the three, the best possible outcome for a high school graduate was to pass the undergraduate examination and graduate university. This qualified them to become *vakils* or further continue their studies to become barristers, as well as obtain jobs in the civil service. The second best outcome was to pass the intermediate examination but not continue further studies. This qualified them to become a pleader. Finally, one of the best possible white-collar jobs a high school graduate could obtain without any further studies is to become a lower-grade lawyer - mukhtar or revenue agents.

Intermediate Graduates - Intermediate examinations were initially only conducted by the

University of Allahabad until the opening of the University of Benares in 1918. Results for the intermediate examination conducted by both universities is obtained from the same source, i.e., Government Gazette of the United Provinces. Due to poor data quality, the data for a few years were taken from the University of Allahabad Calendar. The data begins from 1896, which was the first year a high school graduate in 1894 (the first year in our high school graduates sample) could write the intermediate examination, and continues till 1926. The data comprises of the name of the candidate, their college and their rank (first, second or third class). Unlike the high school records, they do not include the caste of the student. I am only able to directly identify the caste of those students who are matched with their high school records. For the remaining Hindu graduates, I use their surname and identify them as one of the four varnas based on whether 50 percent of individuals with the same surname comes from the same varna. For example, a graduate with the surname 'Joshi' is classified as Brahmin (100 percent of high school students with this surname is Brahmin).

Since a student could only write the intermediate examination atleast 2 years after entering university, I match each high school student (by name) with graduates who pass their intermediate examination 2 or more years after the high school exam year. Thus, a student in 1901 will be matched with someone in the university graduates list who passed the exam in 1903 or after. The upper limit is 7 years, i.e., a student in 1901 will be matched with his records in the intermediate examination graduates list as long as his name appears once between 1903-1908. Over 92 percent of intermediate graduates passed the intermediate examination 2-4 years after high school. I also include the 96 students who passed the *Commercial Diploma Examination*, instead of the intermediate examination. Merging was first done using the matchit function in Stata developed by Raffo (2016). The matches were manually checked for duplicate matches. I follow the rules described in the appendix to resolve non-unique matches (see Appendix C.3).

Undergraduates or University graduates - Intermediate graduates either continued their studies to obtain a bachelors degree in Arts or Science, or they left the university to obtain jobs as

pleaders, for example. Data on students who graduate from the University of Allahabad for both Bachelors in Science and Arts from 1889 till 1923 come from the consolidated list of graduates of all years available in the 1923 edition of the *Calendar of the University of Allahabad*. I further collect the data for graduates who passed the 1924, 1925, 1926 and 1927 examinations from the respective calendars for those years. In addition to this, I digitized the data for undergraduates from the University of Benares and University of Nagpur, the latter of which opened for students from the Central Provinces in 1921.

Thus, I have the list of all undergraduate students who completed their studies between 1898 and 1927 within the five provinces under study. The first year is 1898 since this is the first year that a high school student who graduated in 1894 (first year of the high school graduates sample) could obtain their Bachelors degree. 1927 is the final year for which data is currently available. Like the intermediate examination records, the data includes the name and surname of the graduate, year they pass the exam, name of the college they attended and the rank/division (whether they passed with first, second or third class).

Similar to the above, I match those who passed the intermediate examination with the list of undergraduates, at least two years after they complete their intermediate examination. The maximum limit is 7 years. Thus, intermediate graduates in 1901 is matched with the list of undergraduates who passed between 1903-1910. In case 2 students who passed intermediate examination are matched with the same name in the undergraduates list, the unique match is made for those whose college where they passed intermediate and undergraduate examinations are the same. If not, I follow the same rules mentioned in the appendix (Appendix C.3).

Occupation data - Mukhtars, Revenue Agents - Data on legal practitioners - mukhtars and revenue agents - are obtained from the lists of those who passed the mukhtarship and revenue agent examinations respectively. These lists are published by the Examination Department of the High Court of Judicature at Allahabad in the *Government Gazette of the United Provinces*. Data is available from 1899 to 1922, for those who practised law in the United Provinces, which was the

area of jurisdiction of the high court at Allahabad. Thus, for the analysis on lower-grade lawyers, I restrict the sample to those students who graduated from a high school in the United Provinces. Since these jobs were the best possible outcome for those who did not enter university, I further exclude those who did passed the intermediate examination from the sample. The data contains the name and surname, name of their father, and the district they wrote their exam from. The matching procedure is detailed in Appendix C.4.

3.3 Descriptive Statistics

Summary statistics for high school graduates and intermediate graduates are presented in Table A.1 and Table A.2 respectively. Table A.1 shows that non-elites were three percentage points less likely than elites to pass intermediate or undergraduate examination but three percentage points more likely to become a lower-grade lawyer. Notably, I find that non-elites were exposed to less elite peers compared to elite caste high school graduates. The difference was almost 11 percentage points. The difference was lower among intermediate graduates (see Table A.2). I also find that non-elites were more likely to have passed in the first or second division in high school than elites. Among the intermediate graduates (see Table A.2), there was a higher share of elite peers who had entered university with a third class in the high school exam, relative to their non-elite peers. The size of the college-cohort is also larger than that of the school-cohort.

Compared to elite high school graduates, non-elites were three percentage points less likely to obtain an intermediate college degree or an undergraduate degree after completing high school (see Table A.1). However, merchant caste students performed similarly to non-Brahmin upper castes, though their rate of obtaining either degree was four percentage points lower than that of Brahmins. In contrast, only 26 percent of lower caste students obtained an intermediate college degree, compared to 33 percent among merchant castes. Similarly, only 14 percent of lower caste students earned an undergraduate degree, compared to 19 percent among merchant castes.

Among intermediate college graduates (see Table A.2), 59 percent of merchant caste students and 55 percent of lower caste students went on to complete an undergraduate degree, while 62 percent of Brahmins and 61 percent of non-Brahmin upper caste students achieved the same. Overall, the summary statistics suggest that merchant caste students were just as likely as elites to pursue and obtain a university degree after high school. This helps to alleviate concerns that the demand for education might differ significantly between merchant castes and elites. However, for lower caste students, there remains a substantial gap in university completion rates after high school compared to other groups.

Next, I run balance tests for high school (see Table A.3) and intermediate graduates (see Table A.4) separately. A higher share of elite peers for a high school graduates is not significantly correlated with the age at the time of graduation, the choice of high school examination and the size of the school cohort. Importantly, I find that having a higher share of elite peers has no effect on whether a high school graduate passes in the first, second or third divisions. This is true for non-elite high school graduates as well, implying that a higher share of elite peers in the graduating cohort does not lead to selection of non-elite high school graduates of high ability. This rules out the possibility of sorting of high ability non-elite graduates into cohorts with higher share of elite peers.

4 Empirical Strategy

4.1 Econometric Specification

To estimate the effects of elite peers on the higher education and career outcomes of non-elite high school graduates, I use a similar approach as in Hoxby and Weingarth (2005), and estimate the

following regression using the sample of Hindu high school graduates,

$$Y_{icjt} = \omega_j + \kappa_t + t * \omega_j + Caste_c + \beta Share_{icjt} + \gamma NonElite_{icjt} * Share_{icjt} + \zeta X_{icjt} + \varepsilon_{icjt}$$

where Y_{icjt} is either of three indicator variables that corresponds to whether the high school graduate i of caste c from high school j in the cohort t passes the i) intermediate examination or ii) undergraduate examination or iii) becomes a lower-grade lawyer (mukhtar or revenue agent). The variable $NonElite_{icjt}$ is an indicator variable that equals 1 if i is either from a Vaishya (merchant) or a Shudra caste (lower caste), and is 0 if i is from an upper caste. $Share_{icjt}$ is measured as the share of elite (upper-caste) peers of i of caste c in the same high school j and cohort t. By construction, it is defined as the share of elites in the cohort except i themselves.

The parameter, γ estimates the effect of having a higher share of elite peers on non-elite high school graduate, relative to elite caste high school graduates from the same high school and cohort. The effect of having a higher share of elite peers on elites themselves is given by the parameter, β. Thus, the overall effect of having a higher share of elite peers on non-elite high school graduates is given by the sum of the two parameters, i.e., $\gamma + \beta$. High School fixed effects ω_j are included to control for time invariant effects of high schools. The year effects κ_t controls for any changes that is common to the entire graduating cohort. Caste fixed effects $Caste_c$ controls for time invariant effects of caste. Finally, the interaction term, $t * omega_j$ controls for the linear trends within high schools. This is included to control for any linear changes in school quality. In addition to these, X_{icjt} include various controls such as the share of merchant caste peers, share of peers from lower caste peers, age at the time of graduation, the type of examination the student wrote to pass high school, and importantly, the total size of the graduating school cohort. I control for the demand for schooling among the merchant castes and lower castes, by controlling for the share of merchant caste and lower caste peers of i.

To estimate whether the effects of elite peers are different for different varnas in the caste

system, I impose a full set of interactions between the varna and the share of elite peers, as follows,

$$Y_{icjt} = \omega_j + \kappa_t + t * \omega_j + \alpha Caste_{icjt} + \beta Share_{icjt} + \gamma_u UpperCaste_{icjt} * Share_{icjt} + \gamma_b Merchant_{icjt} * Share_{icjt} + \gamma_l LowerCaste_{icjt} * Share_{icjt} + \zeta X_{icjt} + \varepsilon_{icjt}$$

In the above specification, Brahmin is the omitted category. $UpperCaste_{icjt}$, $Merchant_{icjt}$ and $LowerCaste_{icjt}$ are indicator variables that take the value, 1, if a graduate i, from high school, j, of caste, c, in cohort, t, is a Non-Brahmin upper caste (Kshattriya), merchant caste (Vaishya) and a lower caste (Shudra and Dalits) respectively. γ_u, γ_b and γ_l estimate the effect of a 1 unit increase in the share of elite peers within the same high school across cohorts, on the probability of i, passing intermediate, undergraduate and legal practitioners examinations respectively, compared to a Brahmin graduate for a non-Brahmin upper caste, merchant and lower caste graduate respectively.

Likewise to Lavy and Schlosser (2011), I perform a similar regression as above, but at a higher stage of education. Here, I focus on the sample of intermediate graduates and study the effect of having a higher share of elite peers on the probability that a non-elite student passes their undergraduate examination. Unlike the previous regression, I can control for the ability of the intermediate college student as well as that of their peers, using their high school ranks. I study the effects of elite peers at the college-cohort level for an intermediate college student, i, of caste, c, from college, k, in the intermediate exam graduating cohort, t. Additionally, I include the aforementioned controls as well as the rank of the student in their high school examination and the share of their peers who passed in first or second class.

4.2 Identification

To estimate causal effects, the key identifying assumption is that, conditional on controls, the year by year variation of elite graduates within each high school is random, i.e, it does not vary with the error term for each cohort within a high school and hence, there is no omitted variable bias.

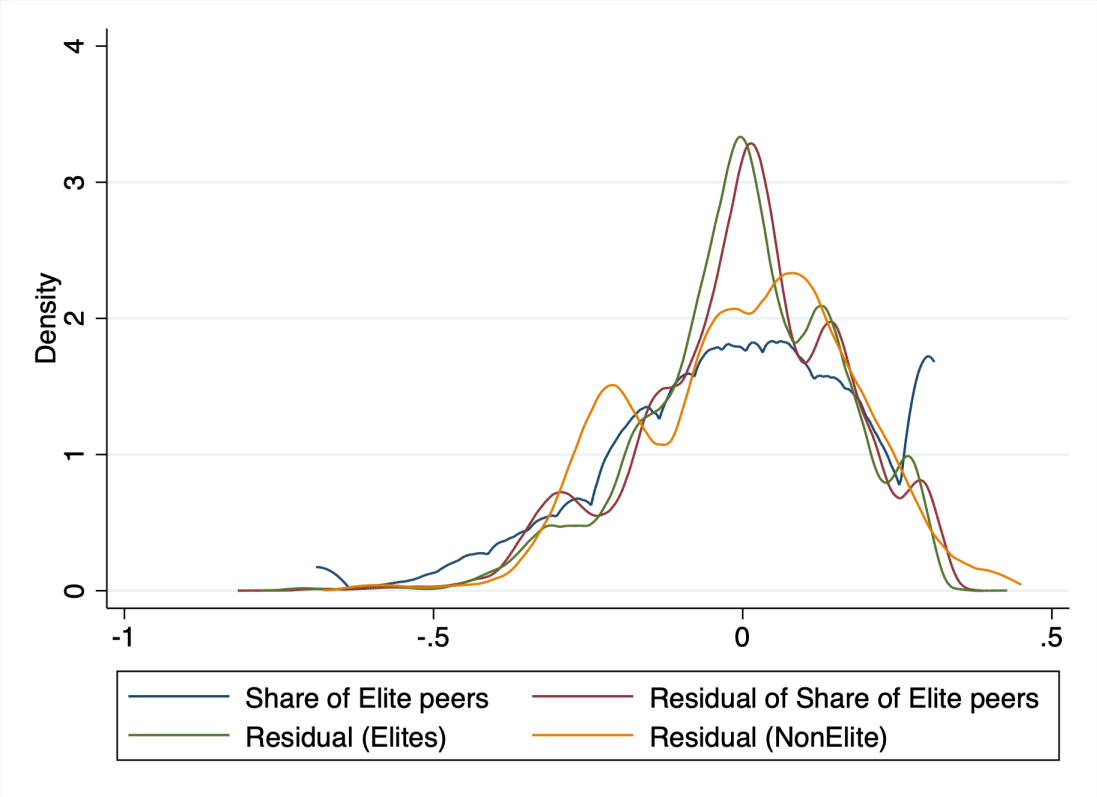
Since I control for the linear trends within high schools, the variation used in identifying the effects is the non-linear jumps in the changes in share of elite peers within the same high school across different cohorts. This estimation approach is similar to that used most recently in Cattan et al. (2023) which was first used by Hoxby (2000) to study peer effects.

One potential concern in the identification is whether there is enough variation in the share of elite peers across cohorts within schools once the fixed effects are controlled for. The standard deviation in the sample of Hindu students is 0.215. For elites and non-elites, this is 0.209 and 0.218 respectively. Once high school fixed effects, year effects, school-specific linear trends and other controls are included, the standard deviation for the sample of Hindu students reduces to 0.164. For elites and non-elites, the standard deviation reduces to 0.157 and 0.175 respectively. This suggests that there exists enough variation to capture the effects of elite peers. The density plots (centered around the mean for ease of interpretation) in Figure 5 shows the distribution of both the actual share of elite peers and the residual share of elite peers, once the fixed effects and controls are accounted for. Generally, there is sufficiently wide variation around the mean for the actual share of elite peers. Once the fixed effects and controls are accounted for, the residual share of elite peers peaks around the mean, with lesser variation than in the share of elite peers in the raw data. However, the variation in residual share of elite peers for non-elites is much wider than that for elites with lower peaks. Overall, the distribution in the residual shares accounting for fixed effects suggest there exist enough variation across cohorts within high schools for both elites and non-elites, as well as the entire sample of Hindu students.

By controlling for school fixed effects, I control for parents choosing high schools based on its *overall* composition. For example, it accounts for parents preferring elite-dominated schools. Identification hinges on parents and teachers being unable to manipulate the exact the share of elite peers in adjacent cohorts within a school. High Schools consisted of all stages of schooling in colonial India. This meant, for most students [34], any parental choice in selection of schools

[34]The exception is those students that transferred from a middle vernacular school or attended a school that only

Figure 5: Distribution of the actual share of Elite peers and residual share of elite peers controlling for fixed effects



Notes: The figure depicts the density plots for the actual and residual share of elite peers. The shares are centered around their respective means for ease of interpretation. Actual share of elite peers is the share of elite peers for each Hindu student. The residual share is obtained from the residuals after regressing the share of elite peers on the high school fixed effects, school-specific linear trends, cohort effects, caste fixed effects, and controls including the Age of the student at the time of the examination, type of high school examination written by the student and the total size of the school-cohort. Residual (Elites) and Residual (NonElite) refer to the residual share of share elite peers calculated for the sample of elite students and non-elite students respectively.). Standard Deviation for the actual share of elite peers is 0.215. Standard deviation for the residual share of elite peers is 0.164. The same for the residual share of elite peers among the sample of elites and non-elites is 0.157 and 0.175 respectively.

happens long before, at least 10 years, before a student's high school graduation. Furthermore, passing rates was never 100 percent at any stage of schooling. Majority of students did not go beyond primary stage of schooling and many dropped at different stages before reach the high school stage. Thus, manipulation by parents or teachers of the share of elite peers for a particular graduating cohort by selection into school-cohorts is very unlikely. Nevertheless, I discuss two possible violations to the identifying assumption.

taught up to middle stage.

Selection/sorting - In standard peer effects estimations, the share of peers is calculated from the total number of students attending each school-cohort. The data used in this paper is restrictive in the sense that it only has the students that graduated from every high school in each cohort, but not the ones that failed to graduate. Whether a non-elite student is present or not in the graduating cohort in itself, is an outcome of the share of elites present in the cohort. For example, teachers in a school-cohort with a high share of elite caste students, may ignore the non-elite student and give preferential treatment to the rest. If the effects are driven by peers, it maybe the case that students from non-elite castes face discrimination from their peers that result in weak academic performance. This implies that if, for example, a graduating cohort has a high share of elite peers, then its less likely for a non-elite student to be present in the graduating cohort unless he is of high ability. On the contrary, if a graduating cohort has less share of elite graduates, then by the same argument, there will be more non-elite graduates of varying ability. To check if this is true, I check whether a non-elite graduate was more likely to pass in first or second division if they had a higher share of elite peers. Using balancing tests, I do not find any evidence that there was any self selection of non-elites by their ability in more or less elite-dominated cohorts within the same school (see Table A.3).

While the above test addresses the potential concern of high or low-ability non-elites being selected into school-cohorts based on the share of elites in that cohort, it does not address the concern of dropouts that may precede graduation. In this scenario, a higher share of elites in a graduating cohort is a function of dropout rates. In cohorts with higher dropout rates, it is likely that graduating cohorts are artificially larger since non-elites may be more likely to drop out before taking their examination. To address this, I perform a similar regression as above, while interacting the measure of share of elite peers on an indicator variable that takes the value 1 if the school-cohort has an above median share of elite peers. Thus, the specification compares the high school grades of non-elite students in cohorts with above median share of elite peers, with those in cohorts with below the median share of elite peers. The coefficient for the effect on attaining second division

grade in the high school exam is positive for non-elite students with a higher share of elite peers in cohorts with a above median share of elite peers and negative for the same but for attaining a third division grade. However, these differences are not statistically significant. Furthermore, even if there did exist the possibility that non-elite students in cohorts with above median share of elite peers was more positively selected, this would imply that the effect of elite peers underestimates the actual effects of attaining university degree among non-elites (since the lower ability student dropped out but cannot be observed and the effect of elite peers on it would be negative).

Finally, as robustness, I perform the baseline specification separately with the sample of cohorts exposed to below the median share of elite peers and above the median share of elite peers. The check accounts for the possibility that the effects maybe different in cohorts which experiences more or less dropout rates. If the effects on attaining university degrees or becoming a lower-grade lawyer is similar in regressions with either sample, then I infer that the results are robust to the concern that the measure of share of elite peers is affected by the fact that students who do not graduate high school is not observed. If the results are similar in either sample, it implies that the effects are driven by the actual variation in elite peers across cohorts, rather than a mechanical association of size of the elite peers and dropouts of non-elites.

Parental Background - To account for differences in family background and parental sorting, the caste of the student is controlled for in the regression. However, it is still possible that this may not be enough to control for parents sorting into schools based on parental preferences. To account for differences in parental investments/background, I restrict the sample to those graduates who are 'close relatives'. These are graduates within the same high school who have the same caste and surname. While it is not deterministically possible to identify whether they are siblings (majority of surnames are repeated more than twice for the same caste), they are likely to be from the same subcaste or extended family. For example, a Kayastha with the Shrivastava surname is from the Shrivastava subcaste of the Kayastha caste. The approach is similar to that used for comparing siblings with different share of high ability peers used in Bertoni et al. (2020), except that rather

than comparing siblings within the same high school but in different years, I compare students who are from the same subcaste within the same high school. I perform the same regression as above but now, include the school by family fixed effects.

5 Results

5.1 Baseline Results

Effect of Elite peers on High School Graduates - Table 1 presents the results of the baseline model. I find that non-elite graduates from merchant castes and lower castes are much more negatively affected from having a higher share of elite peers in their graduating cohort. A 10 percentage point increase in the share of elite peers in a high school-cohort decreases the probability of a non-elite graduate in the same school-cohort passing the undergraduate examination by around 0.74 percent (Col. 2) and becoming a lower-grade lawyer by 0.92 percent (Col. 3), compared to their elite graduate peers. The overall effects of elite peers on the probability of a non-elite high school graduate to pass the undergraduate examination or become a lower grade lawyer is also negative and statistically significant. The effect is negative but not statistically significant for passing the intermediate examination (Col. 1).

For better interpretation, consider that on average, the probability that non-elites pass the undergraduate examination is 18 percent (see Table A.1). A 1 standard deviation increase in the share of elite peers is roughly a 25 percent increase. Thus, a 1 standard deviation increase in the share of elite peers reduces the probability that a non-elite high school student pass the undergraduate examination by around 1.63 percentage points. Relative to the baseline probability of 18 percent, this corresponds to a decrease of around 9%. By similar calculations, relative the baseline, there is a similar decline of 9.2% and a 7.5% in the probability of a non-elite high school student to become a lawyer and pass the intermediate examination respectively. Thus, in summary, the effects of elite

Table 1: Effect of Elite Peers on High School Students

Dependent Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
= 1 if student passes examination of	Intermediate	Undergraduate	Lawyer	Intermediate	Undergraduate	Lawyer	Undergraduate
Share Elite peers	-0.002	0.008	0.026	0.023	0.002	0.024	-0.060
	(0.022)	(0.019)	(0.021)	(0.028)	(0.024)	(0.023)	(0.060)
Non-Elite=1 × Share Elite peers	-0.054	-0.074**	-0.092***				
	(0.036)	(0.031)	(0.033)				
Non-Br. Upper Caste = 1 × Share Elite peers				-0.042	0.011	0.002	0.126*
				(0.032)	(0.029)	(0.025)	(0.065)
Merchant Caste = 1 × Share Elite peers				-0.097**	-0.077**	-0.099***	0.003
				(0.041)	(0.036)	(0.034)	(0.083)
Lower Caste = 1 × Share Elite peers				0.018	-0.028	-0.040	-0.129
				(0.080)	(0.061)	(0.093)	(0.154)
Overall Effects on Non-Elites	-0.056	-0.065**	-0.066*				
	(0.039)	(0.032)	(0.034)				
Overall Effects on Merchants				-0.075*	-0.075**	-0.075**	-0.056
				(0.041)	(0.035)	(0.036)	(0.077)
Overall Effects on Non-Br. Upper Castes							0.066
							(0.060)
All FE and Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	29565	29565	14427	29565	29565	14427	9932

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard Errors are clustered at the High School level. Controls include the share of Merchant caste peers in the school-cohort, share of Lower caste peers in the school-cohort, Age at time of examination, Type of high school examination written by the graduate, total number of students in the school cohort and caste of the high school graduate. Fixed effects include Year effects, High School fixed effects and linear trends within high school. Non-Elite is an indicator variable that takes the value 1, if graduate i, is of a merchant caste or a lower caste. Sample refers to the sample on which the regression is estimated. Columns 1, 2, 4, and 5 are estimated on the full sample of Hindus students. Columns 3 and 6 are estimated on the sample of Hindu students in United Provinces who have not passed the intermediate examination. Column 7 is estimated on the sample of Hindu students who passed intermediate examination.

peers is not homogeneous - in comparison to their elite peers, non-elites exposed to a higher share of elite peers were less likely to continue towards higher education or become lower grade lawyers. Furthermore, the overall effect of elite peers on non-elites is also negative.

Columns 3 to 6 presents the estimates when allowing for the effect of the share of elite peers to vary by the varna. Relative to their Brahmin peers, graduates from all other 3 varnas have more negative effects from ties with elite graduates. However, it is only for the merchant caste graduates that the effect of elite peers is statistically significant, relative to their elite peers. Furthermore, I find that the overall effect of having a higher share of elite peers on the merchant castes is negative for all three outcomes. Compared to their Brahmin peers, a 10 percentage point increase in the share of elite graduate peers in the school-cohort decreases the probability that a merchant caste

graduate in the same school-cohort passes the intermediate examination by 0.97% (Col. 4), undergraduate examination by 0.77% (Col. 5) and to become a lower grade lawyer by 0.99% (Col. 6), relative to their elite peers. Compared to the baseline probabilities, this corresponds to a decline of 6 % in the probability for a merchant caste student to pass the intermediate examination, 10.4% percent decline to pass the undergraduate examination and a 23.4% decline to become a lower-grade lawyer. Thus, the heterogeneous effects of elite peers is driven by the effects on merchant caste graduates.

Finally Column 7, presents the estimates on the effects of elite high school peers on the probability to pass the undergraduate examination for those who passed the intermediate examination. There is no statistically significant effect of having a higher share of elite peers in the school-cohort for a merchant caste or lower caste intermediate graduate to pass the undergraduate examination. There is a positive effect for Non-Brahmin upper caste intermediate graduates, relative to their Brahmin peers but the overall effects on them is not statistically significant. This implies that any negative effect of having a higher share of elite peers in high school does not carry over to further stage of their education if they decide to study beyond the intermediate stage. Instead, having a higher share of elite peers affects the choice of entering university at the intermediate stage.

Effect of Elite peers on Intermediate Graduates - How did effects of elite peers evolve at a higher stage of education? Do the negative effects of elite peers remain when looking at the effects on students at the intermediate college level? I perform similar analysis on Hindu graduates who passed the intermediate examination between 1896 and 1921 (Table 2). In comparison to the results with high school graduates, the coefficients are larger in size for the intermediate college graduates. Columns 1 and 2 present the estimates on the sample of intermediate graduates who were matched with their high school graduation records. This allows me to control for their high school exam rank, which is a measure of their ability. Furthermore, I also include the share of peers who passed with first class and second class in their high school exam.

I find that controlling for own ability, as well as the ability of their peers, a 1 standard deviation

Table 2: Effect of Elite peers on Intermediate college graduates

Dependent Variable	(1)	(2)	(3)	(4)
= 1 if student passes undergraduate examination	Matched Sample		Full Sample	
Share Elite peers	0.085	0.037	0.112	0.090
	(0.097)	(0.095)	(0.128)	(0.123)
NonElite=1 × Share Elite peers	-0.201**		-0.205**	
	(0.081)		(0.095)	
Non-Br. Upper Caste = 1 × Share Elite peers		0.094		0.039
		(0.069)		(0.075)
Merchant Caste = 1 × Share Elite peers		-0.172*		-0.189*
		(0.095)		(0.097)
Lower caste = 1 × Share Elite peers		0.087		-0.137
		(0.250)		(0.228)
Overall Effect on Non-Elites	-0.116		-0.094	
	(0.127)		0.143)	
Overall Effect on Merchant Castes		-0.135		-0.099
		(0.125)		(0.133)
All FE and College-level Controls	Yes	Yes	Yes	Yes
Controls for peer and own ability	Yes	Yes	No	No
Observations	9223	9223	11584	11584

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard Errors are clustered at the College level. College-level controls include the share of Merchant caste peers in the college-cohort, share of peers from among lower castes, total number of students in college-cohort. Peer and own ability controls include high school rank of the intermediate graduate, share of intermediate graduates who passed in first class and second class in their high school examinations, Age of the intermediate graduate and the type of examination they wrote in high school. Matched sample refers to those intermediate graduates whose records can be matched with their results from their high school graduation records. Full Sample refers to the entire sample of Hindu intermediate graduate including those for whom a match could not be made with their results in high school. Specifications 3 and 4 uses varna fixed effects instead of caste, since the caste of the unmatched intermediate graduate cannot be identified using surname. For a few intermediate graduates, their varna could not be identified through their surname. I control for the share of these graduates in the regression.

increase in the share of elite peers (0.17) reduced the probability that a Non-Elite intermediate graduate passed the undergraduate examination by 3.4 percent (Col. 1), relative to their elite peers. Similar to the results from Table 1, I find that the effects are statistically significant and negative

only for the merchant caste, relative to their Brahmin peers. As robustness, I perform similar regression on the full sample (without using controls for the own ability and peer ability since I do not have information on this for the students unmatched with their high school records). I find similar results. However, while the overall effects on non-elites and merchant castes are negative, the standard deviation is very high and they are not statistically significant.

5.2 Robustness

Within-family analysis - Balancing tests conducted for high school and intermediate college graduates in Table A.3 and Table A.4 show that within schools, across different years, the share of elite peers does not predict the different covariates, including the rank of elite and non-elite high school students. This suggests that there is no sorting by better ability students into different school- or college-cohort. However, in the absence of any parent-level controls, other than caste, this does not rule out potential parental sorting of students into schools based on parental background that may correlate with the share of elite peers.

To address this, I follow Bertoni et al. (2020), that compares the outcomes of siblings that attended the same high school but at different years to account for parental sorting. I use surnames and caste to identify 'close relatives' or extended families. With the information on caste and surname, one can usually identify the subcaste the high school student is from. Subcastes are divisions of castes that are different from each other due to different occupational specializations, geographic origins and so on. For example, Banerjee is a Bengali Brahmin surname. Everyone who shares this surname comes from the same subcaste [35]. I define students to be from the same family if they have the same surname and caste.

I then include school by family fixed effects. This compares the outcomes of high school students from the same family who attended the same high school at different points in time. By

[35] Other examples include Kayastha caste members who share the Srivastava surname. They are from the Srivastava subcaste. Vaishya caste members with the surname Agarwal, comes from the Agarwal subcaste.

Table 3: Robustness Checks

Panel A - Inclusion of School by Family Fixed Effects	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dependent Variable = *1, if student passes examination in*		Intermediate			Undergraduate			Lawyer	
Share Elite peers	0.000		0.032	-0.001		0.007	-0.013		0.020
	(0.035)		(0.053)	(0.033)		(0.046)	(0.032)		(0.042)
Non-Elite = 1 × Share Elite peers	-0.145**			-0.107			0.056		
	(0.072)			(0.067)			(0.082)		
Upper Caste = 1 × Share Elite peers			-0.048			-0.013			-0.046
			(0.059)			(0.051)			(0.048)
Merchant Caste = 1 × Share Elite peers			-0.191**			-0.143**			0.035
			(0.073)			(0.068)			(0.090)
Lower Caste = 1 × Share Elite peers			0.003			0.188			-0.064
			(0.252)			(0.222)			(0.222)
Overall Effect on Non-Elites	-0.145*			-0.108			0.043		
	(0.076)			(0.067)			(0.079)		
Overall Effect on Merchant Castes			-0.159**			-0.136**			0.055
			(0.074)			(0.064)			(0.082)
All FE and Controls	Yes		Yes	Yes		Yes	Yes		Yes
Observations	19017		19017	19017		19017	9387		9387

Panel B - Split into Subsamples		Non-Elites			Merchant Castes			Lower Castes	
Dependent Variable = *1, if student passes examination in*	Intermediate	Undergraduate	Lawyer	Intermediate	Undergraduate	Lawyer	Intermediate	Undergraduate	Lawyer
Share Elite peers	-0.116**	-0.066	-0.067	-0.191***	-0.124**	-0.105	0.225	0.144	0.183
	(0.058)	(0.048)	(0.070)	(0.061)	(0.054)	(0.074)	(0.140)	(0.126)	(0.241)
All FE and Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5376	5376	2722	4145	4145	2191	1191	1191	509

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard Errors are clustered at the High School level. In Panel A, the sample is restricted to those high school graduates with the same caste and surname who attended the same high school. Panel A gives the estimates of regressions that include school by family fixed effects, while Panel B gives the coefficients for regressions estimated on subsamples of Non-Elite, Merchant caste and Lower Caste students. In both Panel A and B, controls include the share of Merchant caste peers in the school-cohort, share of Lower caste peers, Age at time of examination, Type of high school examination written by the graduate, total number of students in the school cohort and caste fixed effects. Brahmin is the omitted category. In Panel A, fixed effects include School by Family fixed effects, cohort effects and linear trends within schools. In Panel B, fixed effects include school fixed effects, cohort fixed effects and linear trends within schools. The regression on the probability to become a lawyer is always estimated on the sample of high students from United Provinces and not having passed the intermediate examination.

doing so, I am not only controlling for time invariant factors at the family- and school-level but also controlling for family specific preferences to choose a high school. For example, some families may choose a certain high school for their kids if they think it has better science education which may correlate with the share of elite peers. Panel A in Table 3 presents the regression estimates. I find similar results except that the effect on the probability of being a lower-grade lawyer is no longer statistically significant and has a positive sign.

Splitting into subsamples - Finally, I split the sample by varna and perform a similar regression. This is a more demanding specification since it allows for each control variable to vary by varna. This controls for factors such as varna-specific cohort effects or the varna-specific school

effects. The latter takes into account any time invariant school-specific policies towards different castes. The downside is since the number of observations is greatly reduced, the power is low. Regardless, I find that the negative effects of elite peers are statistically significant for the probability that merchants castes passes the intermediate and undergraduate examination. The effect on becoming a lawyer is negative but is not statistically significant. The coefficients is significantly higher than the overall effects on merchant castes estimated from Table 1. The coefficients for the effects of elite peers on lower castes continues to be not statistically significant but the sign is positive. Given the low share of lower castes among high school graduates, I am cautious to give any interpretation on these results. If the results are not driven by small sample effects, then the discrepancy in the results here and in Table 1 suggest that schools may have had caste-specific policies to address concerns about their accessibility for the lower castes as detailed in Section 2.3.

Splitting by the median share of elite peers - One potential concern is that the share of elite peers calculated from the high school graduating cohorts is a reflection of the dropout rates and not the actual share of elite peers within the classroom. While the balancing tests find that the share of elite peers within a cohort does not correlate with the academic performance of the high school graduates, it does not fully account for any dropouts that occur prior to writing the high school exams. To test this, I check whether the grades obtained by non-elites are significantly different for them in cohorts with a higher share of elite peers than in cohorts with a lower share of elite peers. The intuition here is that cohorts with a higher share of elite peers may have had higher dropout rates, and thus overestimates the actual share of elite peers. Even though the coefficients are not statistically significant, I find that non-elite high school graduates exposed to a higher share of elite peers in cohorts with an above median share of elite peers were more likely to obtain second division grade and less likely to obtain third division grade in high school (Table A.5 Col. 1 - 3). To mitigate concerns that the effects of elite peers are different in school-cohort with below and above median share of elite peers, I split the same of high school students in two and perform the same specification as in the baseline. As in the baseline, I find that in both samples, the effect

of elite peers is negative for the probability that merchant caste students attain an intermediate or undergraduate degree or become a lower-grade lawyer.

5.3 Mechanisms

In this section, I explore potential mechanisms to explain the negative effects of elite peers on the outcomes of non-elites, especially on those from the merchant castes. Firstly, I examine whether interactions between elites and non-elites were driven by differences in caste rank or socioeconomic background. Both have different implications. If interactions are driven by the former, then it is difficult to integrate elites and non-elites since caste rank is hereditary - it does not change across genealogy let alone one's own lifetime. If relations are driven by socioeconomic background, then it implies that the rising upward mobility of non-elites may eventually lead to better relations between them and elites. Secondly, in the absence of controls for effects of teachers, the baseline results do not distinguish between effects due to elite peers themselves or teacher behaviour in elite-dominated cohorts. I perform some heterogeneity analyses that gives suggestive evidence.

Social position vs Socioeconomic background - Elites and non-elites are different from each other due to their caste. Since each caste is ranked in the caste system, caste signifies the social position of the student. On the other hand, since each caste is associated with a different hereditary, traditional occupation, caste signifies the socioeconomic background of the student. If the caste rank is what drives inter-caste interactions, then elites have negative effects on non-elites due to their different social positions which are fixed. If it is the traditional occupation associated with the caste that affects the interactions, then elites have negative effects on non-elites because they come from different socioeconomic backgrounds, independent of caste rank.

To test this, I check whether interactions with elite peers is different for lower-ranked castes compared to higher-ranked castes who have the same hereditary occupation. For this purpose,

I exploit a peculiar feature of the caste system in United Provinces. Among the various castes traditionally associated with being merchants or traders, the *Khattris* were placed among the upper castes. This implied that they were ranked higher than all the other merchant castes in the caste system, even though they had the same traditional occupation. I first, restrict the sample to those high school graduates who come from any merchant caste in the United Provinces. This numbers 4334 graduates. I recalculate the share of elite peers to exclude Khattris from this measure. I then, perform the same regression as in the baseline. The omitted category is Khattri.

If elites treated all their merchant caste peers, whether Khattri or not, only on the basis of their occupational background, then a priori, we would expect that the coefficient on the interaction term is close to 0 and not statistically significant. Results are reported in Panel A of Table 4. I find that having a higher share of elite peers has a negative effect on the non-elite merchant caste high school student, relative to their Khattri peers, to pass the intermediate, undergraduate examinations or become a lower-grade lawyer. This implies that elite interactions with non-elites were driven by differences in caste rank. Even among those peers with the same socioeconomic background, it was those who had a lower social position that were negatively affected by having more elite peers.

Figure 4 showed that the share of merchant caste high school graduates were higher in districts across United Provinces where they had acquired land. District gazetteers, such as that of Saharanpur, where merchants owned over 10 percent of the land indicated the high status of the Agarwal caste that were moneylenders in the district. Did the traditional elite, who cared about social rank, feel threatened by the rise of the merchant castes? To study this, I make use of the land settlement reports across 28 districts in United Provinces. These provide a measure of the share of land owned by each caste in the district. I then the share of land owned by the merchants to split the sample of students from these 28 districts into two – the first consists of students from 20 districts where at most 10 percent of the land was owned by the merchant castes while the second includes 8 districts where merchants owned over 10 percent of land [36]. The negative effects on

[36]Results are same when dividing them by quartiles.

merchant caste students is most pronounced in districts where merchants owned over 10 percent of land (Table A.7. This further suggest that merchant castes faced worse off outcomes in those districts where they resembled 'upstart' or new elites, disrupting the traditional elite structure.

School Type - Evidence from government reports suggests that experience of non-elite caste students was different in public schools managed by the colonial governments and private schools. To test whether the effects differed by type of school management, I divide the data into three subsamples, each corresponding to one of the three types of schools. The first were the high schools managed directed by the provincial government in the provinces directly under British rule. The second type of schools were those schools managed by missionaries or local Indian elite in provinces under direct British rule. The final category consists of schools located in the Princely states under the control of state education department or under private management. Results are presented in Panel B of Table 4. The effects of elite peers is most negative and statistically significant for merchant castes and lower castes in private schools under the management of missionaries and local Indian elites in provinces under direct British rule (see Col. 3 and 4). The effects on non-elite merchants and lower castes in other school types is not statistically significant but is always negative for the former. The effects on merchant castes is always negative while for those in government schools under direct British control, the coefficients for the effects of elite peers was positive for lower castes.

If the effects of elite peers is purely driven by elite students themselves, then we should expect that their effects is negative and statistically significant in all categories of schools. However, I find negative effects on non-elite merchant and lower castes are statistically significant only in private schools. This implies that while elite peers generally had a negative effect, the environment in which they interacted in had an effect on its intensity. Private schools, especially those run by local Indian elites, catered specifically to the needs of Indian upper castes. For example, schools such as the Kayastha Pathshala in Allahabad and Balwant Rajput High School in Agra, specifically catered to the needs for the Kayasthas and Rajputs respectively. I test whether the effects differed

Table 4: Mechanisms

Panel A - Socioeconomic Background vs Social Rank	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variable = *1, if student passes examination in*	Intermediate		Undergraduate		Lawyer	
Share of Elite peers	-0.0801		0.0020		0.1322**	
	(0.0771)		(0.0675)		(0.0665)	
Non-Elite Merchant caste = 1 × Share of Elite peers	-0.0400		-0.1624**		-0.1773***	
	(0.0892)		(0.0653)		(0.0551)	
All FE and Controls	Yes		Yes		Yes	
Observations	4334		4334		2897	

Panel B - Effect of Elite peers in Government vs Private Schools	Provincial Government Schools		Provincial Private Schools		Princely State Schools	
Dependent Variable = *1, if student passes examination in*	Intermediate	Undergraduate	Intermediate	Undergraduate	Intermediate	Undergraduate
Share Elite peers	-0.0086	-0.0399	-0.0105	0.0082	0.1699**	0.0913
	(0.0382)	(0.0356)	(0.0456)	(0.0389)	(0.0729)	(0.0676)
Non-Br. Upper Caste = 1 × Share Elite peers	-0.0536	0.0157	0.0045	0.0376	-0.1553*	-0.0791
	(0.0426)	(0.0420)	(0.0503)	(0.0464)	(0.0860)	(0.0733)
Merchant Caste = 1 × Share Elite peers	-0.0830	-0.0390	-0.0970*	-0.1018*	-0.1719	-0.1375
	(0.0642)	(0.0498)	(0.0566)	(0.0601)	(0.1193)	(0.1080)
Lower Caste = 1 × Share Elite peers	0.1809	0.0785	-0.2041	-0.1541*	0.0100	-0.0945
	(0.1090)	(0.0906)	(0.1240)	(0.0851)	(0.2650)	(0.2003)
All FE and Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	14549	14549	11818	11818	3144	3144

Panel C - Effect of Elite peers by Examination Rank	First and Second Division in HS			Third Division in HS	
Dependent Variable =*1, if student passes Undergraduate examination*	(High Ability)			(Low Ability)	
Share Elite peers	0.110		0.054	-0.022	-0.020
	(0.115)		(0.114)	(0.149)	(0.165)
Non-Elite = 1 × Share Elite peers	-0.285**			-0.015	
	(0.132)			(0.170)	
Non-Br. Upper Caste = 1 × Share Elite peers			0.111		-0.003
			(0.086)		(0.117)
Merchant Caste = 1 × Share Elite peers			-0.231		-0.064
			(0.149)		(0.214)
Lower Caste = 1 × Share Elite peers			-0.111		0.327
			(0.343)		(0.464)
All FE and Controls	Yes		Yes	Yes	Yes
Observations	5883		5883	3312	3312

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard Errors are clustered at the High School level in Panels A and B. Panel A gives the estimates of the effects of elite peers on non-elite merchant castes relative to their Khattri peers. The sample here is restricted to those from all merchant castes in United Provinces. Panel B gives the regression estimates for the effect of elite peers across three different types of schools - Provincial Government (under direct British control), Provincial Private (Missionary and Local Indian elite run schools in direct British ruled provinces) and schools in Princely States, run by both the local princes as well as under private management. Panel C is estimated on the intermediate college graduates and gives the regression estimates across high ability and low ability intermediate college graduates. In both Panel A and B, controls include the share of Merchant caste peers in the school-cohort, share of Lower caste peers, Age at time of examination, Type of high school examination written by the graduate, total number of students in the school cohort and caste fixed effects. In Panel C, controls include the share of high- and low-ability peers in the college cohort, total size of the college cohort, Age at the time of the examination, share of merchant caste and lower caste peers. In Panel A, Khattri is the omitted category. In Panels B and C, Brahmin is the omitted category. Fixed effects panels A and B include school fixed effects, cohort fixed effects, caste fixed effects and linear trends within schools. Fixed effects panels C include college fixed effects, cohort fixed effects, caste fixed effects and linear trends within college. The regression on the probability to become a lawyer is always estimated on the sample of high students from United Provinces and not having passed the intermediate examination.

in schools managed by the local Indian elite and those managed by the missionaries in Table A.6. The effects on lower castes are negative but not statistically significant in both types of schools. However, the effects on merchant castes are negative and statistically significant only in private schools managed by the local Indian elites (see Column 1 and 2).

Graduate Ability - Did the effects of elite peers vary by the academic performance of non-elites? Why did non-elites experience negative effects from interactions with elite peers? One explanation would be that elites exhibited cliquish behaviour and socially excluded or discriminated against non-elites. A contrary explanation would be that non-elites in the presence of more elite peers felt more competitive pressure, lost confidence and were unable to complete university education. To provide suggestive evidence for either of these explanations, I divide the sample of intermediate college graduates into two subsamples by the grade they obtained in their high school examination – the first include everyone who passed in first or second division which were the honours grades [37] and the second subsample is everyone who passed in the third division. Results are presented in Panel C of Table 4. The effects are negative for merchants and lowest castes across both groups but is statistically significant and highest among merchant caste students who passed in the first or second class in high school (Col. 1 -3).

All intermediate graduates who passed their intermediate examinations with any grade were eligible to enter undergraduate classes. This suggests that the role of competitive pressure is limited. The results provide evidence that high-ability merchant caste students exposed to more elite peers were more negatively affected than high-ability merchant caste students exposed to a lower share of elite peers in their likelihood to obtain an undergraduate degree. This suggests that other elites may have seen them as a potential threat, and resulted in greater elite backlash. It may have also resulted in elites exhibiting more cliquish behaviour, helping other students from an elite background to achieve better outcomes and making classrooms difficult for non-elites in more elite-dominated

[37] I group them together since those who passed in first class is only around 7.6 percent of the sample of Hindu students. Coefficients are still negative if regressions are done separately for both.

cohorts. Given the data limitations, it is beyond the scope of the paper to distinguish between the both.

Furthermore, I also test whether non-elites in college experienced more negative effects from high-ability or low-ability elite peers (ability is defined as the grade they received in high school). I find that having either a higher share of high-ability or low-ability share of elite peers has negative effects on non-elites (Table A.8). The negative effect is stronger for non-elites exposed to more low-ability elite peers, suggesting the potential for cliquish behaviour or elite backlash.

6 Conclusion

This paper uses a novel dataset of high school graduates across five colonial Indian provinces to study the effects of elite peers on the social mobility of non-elites. I find that exposure to more elite peers had a negative impact on the likelihood that a non-elite high school graduate, particularly from merchant castes, to pass intermediate or undergraduate exams or become lower-grade lawyers. The negative effects were driven by caste rank and no economic background, with the lower-ranked merchant castes experiencing a higher negative effect from exposure to elite peers, compared to their higher-ranked merchant caste peers. On the other hand, I do not find any robust, statistically significant effects on the lower caste students. Furthermore the negative effects are greatest among private managed schools, particularly those managed by the local Indian elites in provinces under direct British rule, and among high-ability merchant castes college graduates who graduated high school with the highest grades.

These results suggest that connections to elite peers may not be beneficial for non-elites in settings where elites socially exclude non-elites. The elite dominance in colonial schools appeared to have limited the upward mobility of those not part of the traditional elite. The fact that these results hold strongest for merchant castes, a middle class group, suggest that the traditional elites - Brahmins and Kshattriyas - either through management of schools or classroom behaviour, con-

solidated their position and reinforced the rigidity of the caste system. This contrasts with findings from Chetty et al. (2023) that identify exposure to elite colleges to be a positive driver for social mobility. It is entirely possible that these effects are temporary and as time passes, with greater inclusion of non-elites into schools, increased familiarity with non-elites, would lead to positive effects from elite exposure. Overall, the key takeaway from my findings, is that elite-dominated social networks may have less desirable effects on the non-elites which suggests for policies that aim to reduce the social distance between elites and non-elites in classrooms. I leave this for future research.

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Appendix

A Tables

Table A.1: Summary Statistics: High School Graduates (1894-1919)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All Hindus	Elite Caste	Non-Elite Caste	Brahmin	Non-Br. Upper Caste	Merchant Caste	Lower Caste
Age	17.97	17.97	17.97	17.99	17.95	17.82	18.48
	(1.885)	(1.895)	(1.838)	(1.857)	(1.928)	(1.747)	(2.029)
Matriculation	0.67	0.68	0.63	0.75	0.62	0.61	0.69
	(0.470)	(0.466)	(0.484)	(0.432)	(0.485)	(0.489)	(0.462)
School-Cohort size	19.32	19.15	20.10	19.50	18.85	20.59	18.51
	(12.92)	(12.88)	(13.03)	(13.27)	(12.53)	(13.06)	(12.81)
Share Elite peers	0.69	0.71	0.60	0.73	0.70	0.58	0.67
	(0.215)	(0.209)	(0.218)	(0.205)	(0.211)	(0.216)	(0.206)
Share Muslim peers	0.13	0.13	0.14	0.11	0.15	0.14	0.13
	(0.151)	(0.153)	(0.146)	(0.141)	(0.158)	(0.145)	(0.150)
Share Other peers	0.02	0.02	0.03	0.02	0.02	0.03	0.03
	(0.0715)	(0.0698)	(0.0785)	(0.0677)	(0.0715)	(0.0727)	(0.0953)
Intermediate Graduate	0.34	0.34	0.31	0.37	0.32	0.33	0.26
	(0.473)	(0.475)	(0.463)	(0.483)	(0.466)	(0.469)	(0.439)
Undergraduate	0.20	0.21	0.18	0.23	0.19	0.19	0.14
	(0.402)	(0.406)	(0.383)	(0.420)	(0.393)	(0.393)	(0.348)
Lower-grade Lawyer	0.08	0.07	0.10	0.04	0.09	0.09	0.11
	(0.264)	(0.256)	(0.295)	(0.195)	(0.284)	(0.290)	(0.316)
N	29874	24387	5487	11331	13056	4209	1278

Notes: Table depicts the summary statistics at the individual level for different subsamples. This includes the complete sample of Hindu high school graduates from 1894 and 1919.

Table A.2: Summary Statistics: Intermediate Graduates (1894-1919)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All Hindus	Elite Caste	Non-Elite Caste	Brahmin	Non-Br. Upper Caste	Merchant Caste	Lower Caste
First Division in HS	0.12	0.12	0.14	0.11	0.13	0.14	0.11
	(0.330)	(0.328)	(0.344)	(0.317)	(0.338)	(0.351)	(0.309)
Second Division in HS	0.51	0.51	0.54	0.50	0.51	0.54	0.51
	(0.500)	(0.500)	(0.499)	(0.500)	(0.500)	(0.498)	(0.501)
Third Division in HS	0.36	0.37	0.32	0.38	0.35	0.31	0.38
	(0.480)	(0.482)	(0.467)	(0.486)	(0.478)	(0.462)	(0.486)
Share First Division peers	0.12	0.12	0.11	0.11	0.13	0.12	0.10
	(0.142)	(0.143)	(0.135)	(0.144)	(0.141)	(0.136)	(0.130)
Share Second Division peers	0.51	0.51	0.52	0.51	0.52	0.53	0.51
	(0.141)	(0.139)	(0.146)	(0.138)	(0.140)	(0.148)	(0.137)
Share Third Division peers	0.37	0.37	0.36	0.38	0.35	0.36	0.39
	(0.164)	(0.164)	(0.165)	(0.168)	(0.158)	(0.165)	(0.162)
College-Cohort size	43.17	42.67	45.67	42.25	43.07	45.55	46.05
	(25.77)	(25.42)	(27.32)	(25.36)	(25.44)	(27.54)	(26.45)
Share Elite peers	0.70	0.71	0.65	0.73	0.70	0.63	0.70
	(0.158)	(0.153)	(0.171)	(0.141)	(0.163)	(0.174)	(0.146)
Share Muslim peers	0.12	0.11	0.13	0.10	0.13	0.14	0.11
	(0.127)	(0.121)	(0.153)	(0.111)	(0.129)	(0.159)	(0.118)
Share Other peers	0.03	0.03	0.03	0.03	0.03	0.03	0.04
	(0.0484)	(0.0472)	(0.0537)	(0.0479)	(0.0465)	(0.0510)	(0.0638)
Undergraduate	0.61	0.61	0.59	0.62	0.61	0.59	0.55
	(0.488)	(0.487)	(0.493)	(0.485)	(0.489)	(0.491)	(0.498)
N	9296	7744	1552	3933	3822	1252	301

Notes: Table depicts the summary statistics at the individual level for different subsamples. This includes the sample of Hindu intermediate college graduates from 1896 and 1921, who were linked with their results in the high school examinations.

Table A.3: Balance Tables: High School Graduates (1894-1919)

	(1) Age	(2) Matriculation	(3) First Division	(4) Second Division	(5) Third Division	(6) First Div. Non-Elite	(7) Second Div. Non-Elite	(8) Third Div. Non-Elite	(9) School-Cohort Size
Share Elite peers	-0.0948	-0.0177	-0.0031	0.0119	-0.0049	-0.0407	0.0024	0.0431	0.3913
	(0.0811)	(0.0236)	(0.0121)	(0.0240)	(0.0249)	(0.0299)	(0.0561)	(0.0590)	(0.8243)
Observations	29564	29569	29569	29569	29569	5375	5375	5375	29569

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. The coefficients are the results of regressing each outcome with the share of elite peers, the high school and cohort fixed effects, the linear trends within high school, and the caste fixed effects. Standard Errors are clustered at the High School level. Columns 6, 7 and 8 are estimated only using the sample of non-elite high school graduates. Cols. 3-8 refers to the ranks obtained in the high school examinations. Matriculation is an indicator variable that takes the value 1, if a high school student passed the matriculation and is 0 if they pass the school-leaving certificate examination.

Table A.4: Balance Tables: Intermediate College Graduates (1896-1921)

	(1) Share First Div. peers	(2) Share Second Div. peers	(3) Share Third Div. peers	(4) First Division	(5) Second Division	(6) Third Division	(7) College-Cohort Size
shareelitenetwork	-0.0037	-0.0546	0.0582	0.0011	-0.0360	0.0327	5.8044
	(0.0395)	(0.0556)	(0.0449)	(0.0459)	(0.0683)	(0.0491)	(4.2788)
Observations	9223	9223	9223	9238	9238	9238	9238

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. The coefficients are the results of regressing each outcome with the share of elite peers, the college and cohort fixed effects, the linear trends within college, and the caste fixed effects. Standard Errors are clustered at the College level. Cols 1-3 refers to the share of college peers by the grade they got in their high school exams. These variables control for peer ability. Columns 4-6 refers to the grade the intermediate graduate received at high school.

Table A.5: Robustness: Effects of Elite peers in cohorts with above and below median shares of elite peers

Sample	Non-Elites			Below Median Share of Elite Peers			Above Median Share of Elite Peers		
Dependent Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
= 1, if student passes examination in	First Div. In HS	Second Div. in HS	Third Div. in HS	Intermediate	Undergraduate	Lawyer	Intermediate	Undergraduate	Lawyer
Share Elite peers	-0.023	-0.047	0.083	0.023	0.020	0.036	0.148	0.044	0.121**
	(0.039)	(0.081)	(0.085)	(0.049)	(0.050)	(0.039)	(0.092)	(0.080)	(0.059)
Above median share of elite peers × Share Elite peers	-0.025	0.122	-0.098						
	(0.092)	(0.192)	(0.181)						
Non-Br. Upper Caste = 1 × Share Elite peers				-0.066	-0.023	0.036	-0.194**	-0.108	-0.052
				(0.054)	(0.063)	(0.049)	(0.092)	(0.077)	(0.064)
Merchant Caste = 1 × Share Elite peers				-0.150**	-0.141**	-0.135***	-0.400**	-0.064	0.031
				(0.069)	(0.067)	(0.051)	(0.176)	(0.150)	(0.138)
Lower Caste = 1 × Share Elite peers				-0.097	-0.139	-0.276*	-0.373	-0.151	0.129
				(0.131)	(0.109)	(0.141)	(0.247)	(0.180)	(0.248)
Observations	5375	5375	5375	14758	14758	7973	14743	14743	6417

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard Errors are clustered at the High School level. Columns 1,2 and 3 give the estimates the effects of having a higher share of elite peers for non-elite high school students. It includes an interaction term between the Share of Elite peers and a dummy for above the median share of elite peers. Columns 4-6 give the estimates for having a higher share of elite peers in the sample of cohorts with a below median share of elite peers. Column 7-9 give the estimates for having a higher share of elite peers in the sample of cohorts with a above median share of elite peers. Fixed effects in columns 4-9 include High School fixed effects, caste fixed effects, cohort fixed effects and the linear trends within schools. Controls include share of merchant caste and lower caste peers, age at the time of examination, type of high school examination and size of the school-cohort.

Table A.6: Effects of Elite peers in Different Types of Private Schools

Dependent Variable	Private Indian Schools		Private Missionary Schools	
=1, if student passes examination in	Intermediate	Undergraduate	Intermediate	Undergraduate
Share Elite peers	-0.0679	-0.0424	0.0215	0.0364
	(0.0660)	(0.0615)	(0.0789)	(0.0534)
Non-Br. Upper Caste =1 × Share Elite peers	0.0132	0.0994	0.0092	0.0044
	(0.0765)	(0.0621)	(0.0772)	(0.0672)
Merchant Caste = 1 × Share Elite peers	-0.1610**	-0.1552**	0.0714	0.0313
	(0.0633)	(0.0665)	(0.0968)	(0.0925)
Lower Caste = 1 × Share Elite peers	-0.1589	-0.1755	-0.1597	-0.1787
	(0.1944)	(0.1328)	(0.1865)	(0.1580)
All FE and Controls	Yes	Yes	Yes	Yes
Observations	6788	6788	3950	3950

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard Errors are clustered at the High School level. Columns 1 and 2 give the estimates for private schools run by local Indian elites in provinces under direct British rule. Columns 3 and 4 give the estimates for private schools run by missionaries in provinces under direct British rule. Fixed effects in include High School fixed effects, caste fixed effects cohort fixed effects and the linear trends within schools. Controls include share of merchant caste and lower caste peers, age at the time of examination, type of high school examination and size of the school-cohort.

Table A.7: Effect of Elite Peers on High School Students: Heterogeneity by Land Ownership of Merchants

Dependent Variable	(1)	(2)	(3)	(4)	(5)	(6)
= 1, if student passes examination in	Intermediate	Undergraduate	Lawyer	Intermediate	Undergraduate	Lawyer
Share Elite peers	0.008	0.011	0.035	-0.103	-0.110	0.120*
	(0.054)	(0.045)	(0.041)	(0.073)	(0.076)	(0.062)
Non-Br Upper Caste = 1 × Share Elite peers	-0.070	-0.036	-0.061	0.031	-0.001	-0.046
	(0.070)	(0.046)	(0.064)	(0.083)	(0.085)	(0.045)
Merchant Caste = 1 × Share Elite peers	0.012	-0.012	-0.278***	-0.255***	-0.179***	0.016
	(0.106)	(0.106)	(0.102)	(0.072)	(0.052)	(0.090)
Lower Caste = 1 × Share Elite peers	0.010	-0.037	0.263	-0.062	-0.239	-0.437**
	(0.239)	(0.187)	(0.180)	(0.190)	(0.183)	(0.165)
Overall Effect on Merchants	0.019	-0.001	-0.243**	-0.358***	-0.288***	0.136*
	(0.102)	(0.100)	(0.105)	(0.088)	(0.088)	(0.078)
All FE and Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5573	5573	3870	6021	6021	4034

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard Errors are clustered at the High School level. Controls include the share of Merchant caste peers in the school-cohort, share of Lower caste peers in the school-cohort, Age at time of examination, Type of high school examination written by the graduate, total number of students in the school cohort and caste of the high school graduate. Fixed effects include Year effects, High School fixed effects and linear trends within high school. Non-Elite is an indicator variable that takes the value 1, if graduate i, is of a merchant caste or a lower caste.

Table A.8: Effects of high- and low-ability elite peers on Intermediate College Graduates

Dependent Variable *= 1 if student passes undergraduate examination*	(1)	(2)
Share low-ability elite peers	-0.030	0.017
	(0.111)	(0.103)
NonElite=1 × Share low-ability elite peers	-0.399***	
	(0.092)	
Share high-ability elite peers	0.185**	0.110
	(0.072)	(0.083)
NonElite=1 × Share high-ability elite peers	-0.228***	
	(0.083)	
Non-Br. Upper Caste = 1 × Share low-ability elite peers		0.058
		(0.092)
Merchant Caste = 1 × Share low-ability elite peers		-0.428***
		(0.128)
Lower Caste = 1 × Share low-ability elite peers		-0.025
		(0.220)
Non-Br. Upper Caste = 1 × Share high-ability elite peers		0.058
		(0.090)
Merchant Caste = 1 × Share high-ability elite peers		-0.261**
		(0.107)
Lower Caste = 1 × Share high-ability elite peers		0.212
		(0.234)
All FE and Controls	Yes	Yes
Observations	9223	9223

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard Errors are clustered at the College level. Fixed effects include College fixed effects, caste fixed effects, cohort fixed effects, and the linear trends within college. Controls include share of merchant caste and lower caste peers, age at time of examination, type of high school examination, and size of the college-cohort. College-level controls include the share of Merchant caste peers in the college-cohort, share of peers from among lower castes, and the total number of students in college-cohort. Peer and own ability controls include high school rank of the intermediate graduate, share of intermediate graduates who passed in first class and second class in their high school examinations. Share of low-ability elite peers refers to the share of elite peers in the college-cohort that passed in the third division in their high school examination. Share of high-ability elite peers refers to the share of elite peers in the college-cohort that passed in first or second division in their high school examination.

B Figures

Figure B.1: Total number of High School Graduates (1894-1919)

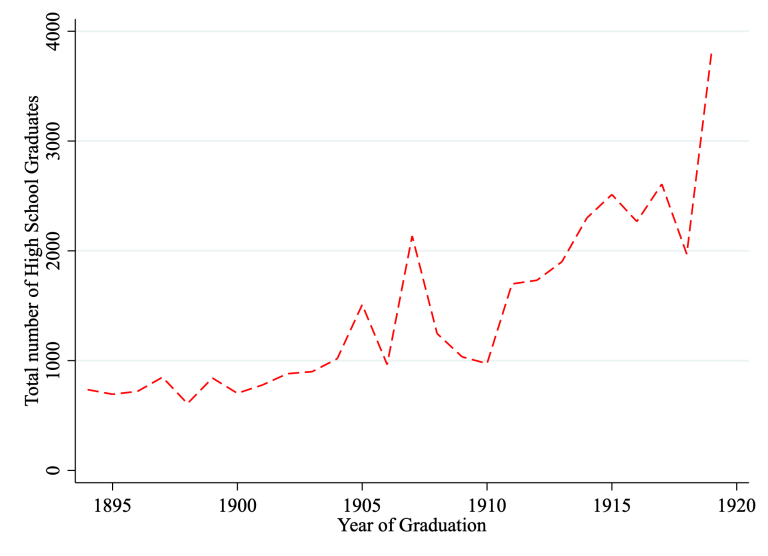


Figure B.2: Total number of High Schools sending graduates (1894-1919)

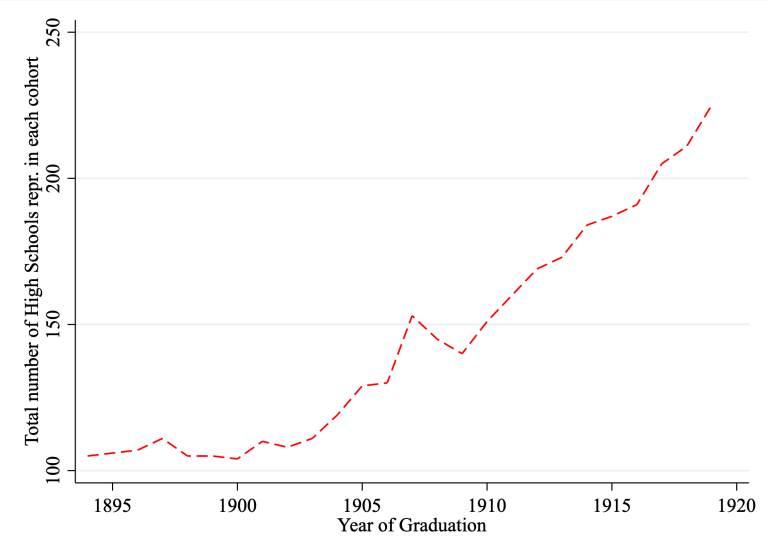


Figure B.3: Total number of High School Graduates (1894-1919) in United Provinces vs other provinces

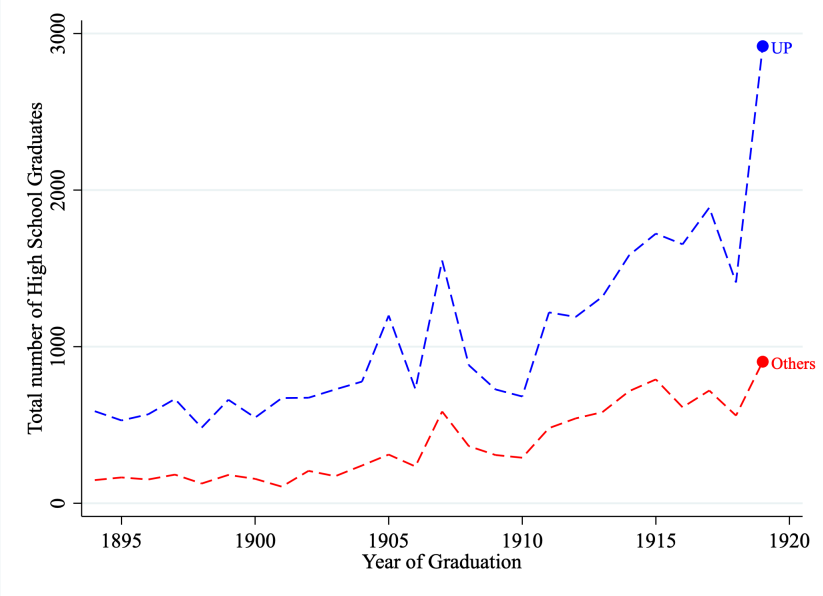


Figure B.4: Total number of High School Graduates (1894-1919) in Other provinces

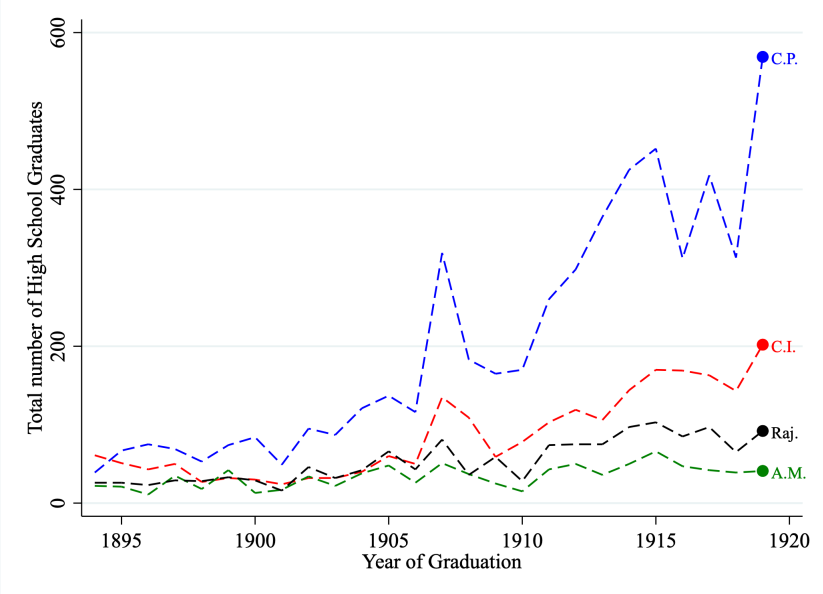


Figure B.5: Total number of High Schools (1894-1919) by province

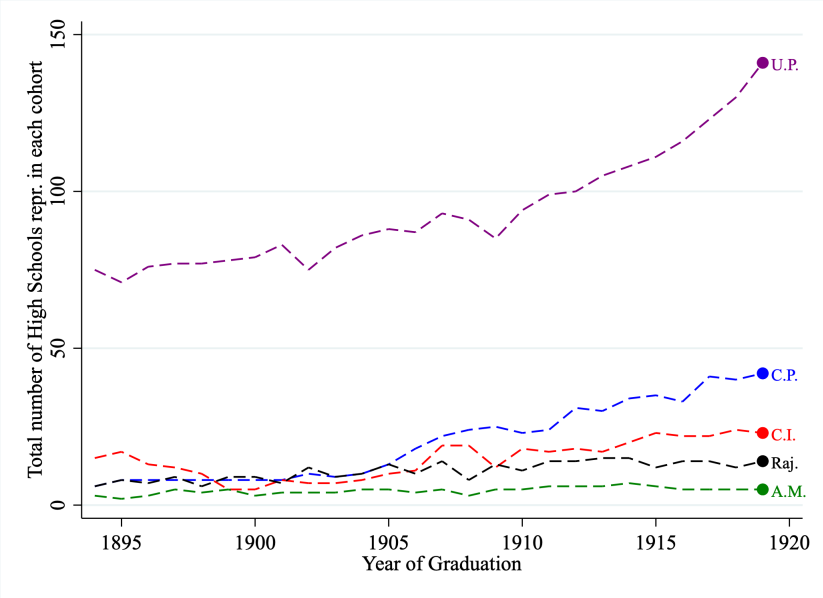
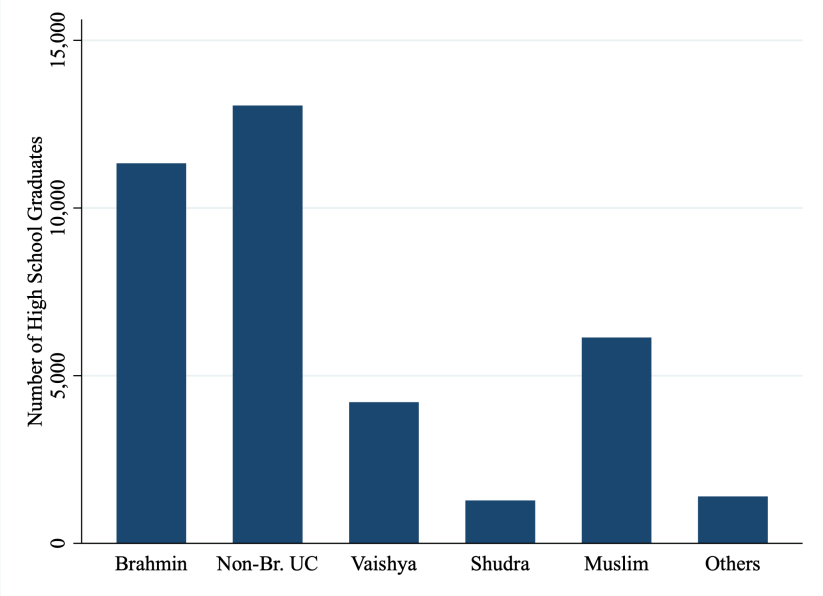


Figure B.6: Total number of High School Graduates (1894-1919) by Varna/Religion



C Data Matching and Classification of Castes

C.1 Example of data on High School Graduates

Figure C.1: Snapshot of Primary raw data of High School Graduates

LIST OF CANDIDATES WHO HAVE PASSED THE MATRICULATION EXAMINATION HELD IN MARCH 1912.

	Roll no.	Name of candidate.	Age.	Caste.	Name of school.	Passed in Division
			Y.M.			
Agra, Government High School, 1—46.	6	Dal Chand	17–5	Vaish ...	Agra, Government High School.	II
	10	Jai Deva Sharma ...	19–3	Brahman ...	Ditto ...	II
	15	Khawaja Rahat Husen ...	16–9	Mahomedan ...	Ditto ...	II
	32	Raja Ram Chaturvedi ...	20–7	Brahman ..	Ditto	III
	43	Syed Mohammad Raza Ahmad Rizvi.	18–2	Mahomedan ...	Ditto ...	II
	44	Saieed Ahmad Jafri ...	19–8	Do. ...	Ditto ...	III
	45	Trilock Singh ...	16–7	Jat ...	Ditto	III
	49	Anand Behari Mathur ...	16–2	Kayastha ...	Agra, St. John's Collegiate School.	II
School, 47—89.	52	Bateshwar Dayal Shiuhal ...	16–8	Vaish ...	Ditto ...	III
	53	Bhagwati Prasad ...	17–7	Kayastha ...	Ditto ...	II
	55	Birj Mohan Singh ...	19–2	Jat ...	Ditto ..	II
	56	Debi Dayal ...	21–7	Kayastha ...	Ditto	III
	57	Dwarka Prasad ...	17–10	Vaish ...	Ditto ...	II
	62	Jagmohan Narayan Choudhry	16–8	Kshattria ...	Ditto ...	II
	63	Jai Narain Raizada ...	16–3	Kayastha ...	Ditto ..	II

C.2 Example of classifying castes into varnas based on the 1901 census

I illustrate the classification of caste with the example of United Provinces. In the 1901 census, castes were divided into 14 groups, ranked by descending order of their 'ritual' rank of purity. Ranks were based largely on traditional occupations, but also local rules of diet (whether the person ate meat or beef), and rules of social interactions and untouchability (for ex., castes from whom Brahmins could take water were placed higher compared to those from whom Brahmins could not). Brahmins were in group 1. I place these castes in the Brahmin group. Group 2 consists of castes that were allied with Brahmins, such as *Bhumihars* and *Tagas*. Groups 3 and 4 comprised of Kshattriya castes such as *Rajput*, a martial caste and scribal castes such as *Kayastha*. I place castes from these 3 groups in the Non-Brahmin Upper Caste group. Groups 5 and 6 comprised of Vaishya (merchant) castes and those castes allied to them. Castes from these groups are placed together in the Merchant caste group. Group 7 comprises of castes that were not backward but the

British civil service officers were unsure whether they were to be included under Upper Castes. These include Jats and Halwais – the former would be placed at a higher rank in the later censuses. For consistency, I use the ranking in the 1901 census. Finally, groups 8-10 comprised of all shudra castes, while groups 11-14 comprised of all Dalit castes. I place them all under the Lower Castes group. Similar tables were constructed for all the other provinces, and I assign each caste to the 4 groups in the same manner.

C.3 Rules followed in case of non-unique matches between lists of High School and Intermediate Graduates

In case of non-unique matches, I use the following rules –

- If 2 high school students are matched with the same name in the intermediate graduates list, but one of them is from a different province compared to the other, then the unique match is made for the student with the same name and same province.
- If 2 high school students are matched with the same name, but both are from the same province as the matched name, then I compare the district of their high school and that of the college. If they match, then a unique match is made for that student.
- If the districts don't match for both, then no unique matches are made, and both are considered to not have passed the intermediate examination.

C.4 Rules followed in matching Mukhtars and Revenue Agents with their High School Graduation records

Assuming the district corresponds with the district of birth/ location of their high school, I link the list of lawyers with the high school graduates data using the following rules -

- For matching with the lists of mukhtars and revenue agents, high schools students are matched with names in these lists by their name and district where their high school is located. Only those who are at most 32 [38] at the time they wrote the exam is considered as a prospective match. For pleaders, I use the list of high school students that passed the intermediate examination and the same rule is applied [39]

- For the unmatched names, I next match the lists by name and division (an administrative unit that consists of 3 or more districts).

- For the remaining list of unmatched names, I look for a unique match by name from any district outside the division that contains the district of their high school.

[38] A candidate was qualified to write the mukhtarship examination till he reached 30 years of age.

[39] A candidate for the pleadership examination was not prescribed any age limit, but had to pass their intermediate examination.