

The Long-Term Effect of British Colonialism on Women Empowerment in India^{*}

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January 16, 2023

Abstract

This paper examines the long-term effect of British colonialism on women empowerment in India. The colonists both improved women's position and worsened it. On the one hand, they liberalized the law on some issues and established legal institutions that fostered women's rights, while on the other, they obstructed change in women's favour and imposed constraints on women which found support amongst Indian men. Consequently, the overall long-term effect of British colonialism on Indian women is theoretically ambiguous. Using data on British colonization from historical sources, and on married women's contemporary economic outcomes from the National Family Health Survey and National Sample Survey, we try to resolve this ambiguity empirically. Specifically, we compare women's contemporary economic outcomes across areas in India that were under direct British colonial rule with areas that were under indirect colonial rule. Controlling for selective annexation using a specific policy rule, we find that women who currently live in areas which were directly under British rule, compared to women who currently do not live in areas that were under direct British rule, do better in terms of almost all measures of women empowerment including employment, within-household decision-making, financial autonomy, mobility, etc. We provide suggestive evidence that these effects arise because the former group of women, compared to the latter, are more educated, were married at an older age, have lower actual fertility, possess better gender attitudes, and are married to men who are more likely to be literate and have better gender attitudes. Overall, our results indicate that British colonialism had a positive long-term effect on women empowerment in India. Our findings highlight the importance of understanding social background and historical factors when we think about gender inequality.

JEL codes: J12, J16, O12, O15

Keywords: Colonialism, India, Intimate Partner Violence, Women Empowerment.

^{*}All remaining errors are our own.

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1 Introduction

In this paper we study the long run impact of British colonial rule on female economic outcomes in India. India was a British colony for close to two centuries with the East India company ruling over the Indian subcontinent from 1757 till 1856 and British crown taking over the administration from 1858 till 1947 after which India became an independent nation. Two centuries of British rule resulted in a number of institutional changes that have been shown to have persistent effect on present day economic outcomes (Iyer, 2010; Roy and Tam, 2021; Jha and Talathi, 2021). An important change that occurred was the setting up of formal legal code largely based on the English laws. This institutionalised many cultural practices prevailing in India and abandoned others and some of these legal changes had important implications for status of females in the society. For example, the British prohibited Sati (an age old practice of widow-burning), child marriage and female infanticide, allowed widow remarriage, increased the age of consent to sexual intercourse and enacted various laws to improve women's inheritance rights.

While some of the legal changes brought in by the British colonization were aimed at abandoning the archaic patriarchal cultural practices that were detrimental to women's socioeconomic status, at the same time they enacted many legal provisions (like restitution of conjugal rights, regularization of prostitution and hampering efforts of female suffrage) that obstructed efforts to empower women by not allowing them to vote and reducing their role to merely fulfilling man's wishes. These legislations even though contradictory, were expected to have implications for female outcomes and their role in the society. We examine the impact of these legal changes brought in by the British colonial rule on contemporary economic outcomes for females, close to two centuries after India became independent.

The reason we want to study the long term effect is because while significant progress has been made towards empowering women, there is evidence that suggests that even today females are discriminated against in labour markets, have poor education outcomes, have limited agency within the households and are often subject to domestic violence. Through

this study we want to examine if historical factors, particularly the colonial rule, has any role to play in explaining these inferior contemporaneous outcomes for females. The reason we expect colonial rule to have persistent effects is because social norms and culture surrounding the role of women in the society usually change very slowly over time and thus watershed moments in history, British colonization in our case, that influence these norms are expected to have persistent effects. Additionally, the laws and the legal structure that was adopted after independence was heavily based on the colonial laws, suggesting path dependence in the legal environment. Studying the impact of historical factors on gender outcomes also allows us to address an important criticism of the quantitative work in this area - inability to incorporate social norms and context in explaining female economic outcomes. While it is possible to explore the impact of institutional changes before the colonial rule on female outcomes, lack of data availability and absence of formal legal codes prevent this analysis.

A priori since the colonial laws pertaining to females seem contradictory, the impact of colonial rule on female economic outcomes is theoretically ambiguous. Empirically, we solve this ambiguity by using the variation in the degree of colonial rule in different Indian regions. Before the British colonization, the present day India consisted of many “princely states” - a political community that had its own legal, political and administrative structure, which were ruled by hereditary kings. The East India Company started its conquest of these princely states in 1757 but did not annex all the regions in the country primarily because it was not numerically and politically strong enough to administer the entire sub-continent (see Figure 1). The annexation, which happened mostly by wars and occasionally by local ruler surrendering the princely state due to non payment of debt, continued till 1857 when the crown took over the administration of India and stopped further annexation. Thus, within the same country there were territories (referred to as “British India”) that came under direct control of the British rule and colonial laws were applicable in these areas. The princely states, on the other hand, enjoyed legal, political and administrative autonomy,

however, the defense and foreign policy were controlled by the British¹.

We use this variation in British colonization within the present day India to identify the impact of British colonization on female economic outcomes. However, British conquest of Indian regions is unlikely to be random. Iyer (2010) in fact shows that the East India Company prioritized agriculturally productive regions for annexation and therefore a simple comparison between British Indian districts with princely states is unlikely to give a causal impact of British colonization. This is particularly true if agriculturally fertile regions had different gender norms and attitudes towards female empowerment as compared to other regions. Hansen et al. (2015) show that societies with longer history of agriculture have worse gender norms and consequently lower female labour force participation rates. Alesina et al. (2013) show that traditional farming practices have an impact on gender norms and the perception about appropriate role of women in the society. Therefore a simple comparison of female economic outcomes in the present day districts that were under direct British control with districts that were under indirect British rule (or part of princely states) is likely to be confounded by pre-existing norms around socioeconomic participation of females.

We address this potential endogeneity concern using the Doctrine of Lapse policy of annexation of princely states in the 1848 to 1856 period by the East India Company as an instrument for British colonization following Iyer (2010). Lord Dalhousie, the governor general in India between 1848 and 1856 followed the notorious policy wherein if the ruler of the princely state dies without any natural heir (adopted children were not recognized as legal heir) the princely state would cease to be under the rule of the local king and would come under the British rule. Under the plausible assumption that the death of the king without a natural heir is likely to be exogenous to the prevailing gender norms, we use this policy of annexation to study the causal impact of British colonial rule on female economic outcomes. The exogeneity assumption, however, would be violated if the British were involved in the death of the king to gain control over the princely state and that this

¹The colonial government also reserved the right to intervene in the internal matters of the princely states in case needed.

motivation was driven by reasons that can potentially have implications for female outcomes. However, As Iyer (2010) argues, the death of the ruler without a natural heir rarely resulted in British annexation before the lapse policy was introduced in 1845 and thus it seems unlikely that British systematically used the death of the king as a way to annex princely states.

We use participation of females in labour market and nature of their employment as measures of female economic outcomes. In addition, we capture the cultural beliefs around the participation of women in the society by looking at attitude towards women mobility, financial autonomy, agency within the household, and exposure to Intimate Partner Violence (IPV). We obtain data on these measures from two sources: National Family Health Survey (NFHS) conducted in 2015-16 and National Sample Survey (NSS) conducted in 2011-12. We thus study the impact of British colonization on female outcomes close to two and a half centuries later. NFHS is a nationwide demographic health survey of India that administers woman's survey to collect information related to women's work, empowerment, and domestic violence. NSS is a large household survey that has information on employment status of the household members. We merge these datasets with the historical data collected by Iyer (2010) that has information on whether the district was historically under direct British rule or not, mode and year of annexation.

Our first stage results suggest strong positive association between death of kings without natural heirs and the likelihood of annexation of princely states. Our IV-2SLS estimation results suggest that females are more economically empowered in districts that were historically under direct British rule suggesting persistent gendered effects of colonization. In particular, we find that females have a higher likelihood of being employed, particularly as wage employees or casual labourers in erstwhile British districts. They are also less likely to face mobility restrictions or have exposure to IPV. At the same time they are more likely to have financial autonomy, have better agency within households, and are less likely to be exposed to IPV in districts that were under direct British rule. Our OLS coefficients on

other hand are either too small or insignificant in many cases, highlighting that OLS results are possibly negatively biased. This is consistent with our expectation of selective British annexation of agriculturally fertile regions and worse gender norms in these regions.

We also provide suggestive evidence that these positive female outcomes arise because females in areas colonized by Britishers are more educated, were married at an older age, have lower actual fertility, possess better gender norms, and are married to men who are more likely to be literate and have better gender norms. We also rule out the possibility that these effects are driven by better employment and education opportunities in general for everyone and not specifically for females. Our results show that even as compared to males females perform differentially better in districts under direct British rule as compared to indirect rule. Additionally, Jha and Talathi (2021) show worse economic outcomes in British districts and therefore if anything general employment opportunities are expected to be lower in British districts.

1.1 Related Literature

The paper contributes to the large body of literature that looks at the long-term effects of colonialism on various contemporary macro- and micro-economic outcomes including GDP (Acemoglu, Johnson, & Robinson, 2001; Nunn, 2008), regional development (Jha and Talathi, 2021), quality of government (La Porta et al., 1999), law and its enforcement (La Porta et al., 1998), agricultural investments and productivity (Banerjee and Iyer, 2004), public goods (Banerjee et al., 2005; Iyer, 2010), human capital (Huillery, 2009; Dell, 2010; Chaudhary and Garg, 2015), women empowerment (Roy and Tam, 2021; Guarnieri and Rainer, 2021), civil conflicts (Michalopoulos and Papaioannou 2016), cultural traits like co-operation norms and social trust (Nunn and Wantchekon 2011; Chaudhary et al., 2020; Bhattacharya and Mukhopadhyay, 2022) etc. (see Nunn 2020, 2014 for a detailed review of this literature).

Within this literature, our paper is most closely related to Roy and Tam (2021) and

Guarnieri and Rainer (2021). To our knowledge, these are the only two papers that examine the effect of colonialism on outcomes for women. Roy and Tam (2021) examine the short- and long-term effects of British gender reform on female child marriages and gender gap in education in India. Exploiting the Child Marriage Restraint Act (1929) which fixed girls' minimum legal age at first marriage to 14 years in British India (but not in the princely states) as a natural experiment, the authors find that female child marriages increased in the regions affected by the law right after the law was enacted, which was followed by a sharp decline in female child marriages in the affected region post-independence in 1961–1981. Further, using several nationally representative datasets, the authors show that there was a long-term decline in child marriages and an increase in educational attainment among women in affected regions. Guarnieri and Rainer (2021) studies the long-term effects of colonialism on women by utilizing the partition of Cameroon into a British and a French colony between 1919 and 1961 as a historical natural experiment. The two colonial regimes opened up divergent economic opportunities for women: women in British territories gained opportunities to earn cash wages under the same conditions as their male counterparts, while the French colonial practice invested in the male employment dominated infrastructure sector. Using the former Anglo-French border within Cameroon in a geographical regression discontinuity design, the authors find that the British colonial rule empowered women economically in terms of access to employment and being paid in cash wages but at the same time made women highly vulnerable to domestic violence.

The paper is also related to the literature on the determinants of gender inequality in developing countries. Gender inequality manifests itself in various forms in developing countries including, but not limited to, disparities in health, education, labor market participation, freedom of choice, and bargaining power within marriage. This literature has attributed these disparities to several factors such as heavy dependence of developing countries on activities that men have comparative advantage in (Qian, 2008; Carranza, 2014), weaker property rights for women (Goldstein and Udry, 2008), lack of technological progress in

home production (Dinkelman, 2011; Meeks, 2014; Devoto et al., 2012), dowry system (Bloch and Rao, 2002; Alfano, 2017; Bhalotra et al., 2018; Sekhri and Storeygard, 2014), old-age support norm (Ebenstein and Leung, 2010), patrilineality (Deininger et al., 2013; Anderson and Genicot, 2015), child marriage and early marriage (Field and Ambrus, 2008; Roychowdhury and Dhamija, 2021), excessive importance of sons in religious rituals (Chakraborty and Kim, 2014; Jayachandran, 2017), social norms regarding the gendered division of labor (the ‘requirement’ of women contributing a certain number of hours to home production) (Afridi et al., 2022), etc. (Jayachandran (2015) provides an excellent review of this literature).

The rest of the paper is structured as follows: Section 2 provides the contextual background, section 3 gives details of the data used, section 4 explains the empirical methodology, section 5 presents the results and section 6 concludes.

2 Background

This section provides a background to the colonial policies that have implications for the long run outcomes for females. While the East India Company decided not to intervene in the Hindu laws, traditional cultural beliefs and practices, this did not hold in practice particularly when the Hindu laws/custom contradicted with the Western legal concept. This interference was particularly high for cultural practices relating to women. The British believed that many Hindu practices were detrimental for the status of women and they claimed to liberalize women’s position in the society by enacting a series of laws. In particular, Between 1795 and 1937, they liberalized the laws on six major issues of relevance to women. (1) Sati (widow-burning) was prohibited in 1829, and (2) widow remarriage allowed in 1856. (3) The age of consent to sexual intercourse was fixed at 10 in 1860 and raised to 12 in 1891. (4) Female infanticide was prohibited in Acts of 1795, 1804 and 1870, and (5) child marriage forbidden in 1929. (6) Various laws improving women’s inheritance rights were passed in 1874, 1929 and 1937, culminating in the Hindu Women’s Right to Property Act, which gave limited

rights to widows only [Everett, 1981:144-6; Thapar, 1963:482 and 487; Asthana, 1974:21-2].

These legal changes were, however, only applicable to areas that were under direct colonial rule. In other words, Princely states continued with the traditional cultural practices of Sati, child marriage among others. In addition, there were very little gender reforms in the Princely states. As noted in Roy and Tam (2016), the only Princely States that implemented gender-related reforms were the Mysore and Kathiawar Agency of Baroda. Mysore in 1894 abolished the marriage of girls below the age of 8, and marriage between girls under 16 years old to men over 50. However, the law was occasionally implemented by prosecuting the lower caste (Ramusack, 2003). Kathiawar agency tried to abolish female infanticide but only among a few tribes with little success (Walker, 1856). Thus, while there was enactment of progressive colonial laws in British India, no such legal changes happened in Princely states.

However, there is also evidence that attitude of the colonial government towards females was not completely progressive. The British introduced provision for the restitution of conjugal rights that allows male partner to sue his spouse for refusal to consummate marriage. A prison term was introduced for non-compliance tying women even more strongly to the institution of marriage even when they did not wish to. The British, in addition, deteriorated the social position of women by encouraging and legalizing prostitution primarily to serve the needs of soldiers recruited in the British army. Women were subject to violence and lived in deplorable health conditions in those brothels. The colonial government also ignored the Indian women's demand for political representation and even obstructed efforts towards their suffrage. The 1919 government of India act which enfranchised 3% of Indian men for provincial assemblies did not allow women to vote. This is thought to be based on the premise that women were uneducated and unaware therefore were not considered responsible to vote (Liddle and Joshi 1985)². These policies suggest that women did not necessarily face better environment in areas under direct British rule.

Additionally, Chaudhary (2009) discusses that British paid very little attention towards

²Women in Britain were also not allowed to vote until 1928.

primary schooling. Public spending on primary education was lower in British India as compared to princely states. In addition, whatever little spending on education was there, it was geared towards serving the elites, providing very limited opportunities to females and the disadvantaged castes to receive education. Consequently, female literacy was abysmally low in the areas under direct British rule³. Given the contrasting colonial policies towards females, it is therefore not ex ante clear whether British colonial rule would have a positive impact on female outcomes in the long run.

3 Data

3.1 Data Sources

This study makes use of data from various sources. First, we use rich district-level historical data collected by Iyer (2010). This dataset provides information on regime under which the districts historically were (i.e., whether a district was under direct British rule or was it a part of a princely state), mode of annexation (e.g., conquest, grant, doctrine of lapse, etc.), year of annexation, etc. for 417 Indian districts (as per 1991 Census) from 23 major Indian states and union territories. Since between Census 1991 round and Census 2011 round, several districts were split into two or more districts, historical information for the 417 Census 1991 districts could be mapped to 552 Census 2011 districts⁴. Out of these 552 districts, 177 were princely states (32%) and 375 were British-ruled (68%). The historical data does not include districts from Andaman and Nicobar, Daman and Diu, Dadra and Nagar Haveli, Mizoram, Meghalaya, Manipur, Nagaland, Sikkim, Lakshwadeep, and Pondicherry (see Table A1 in the Appendix for the list of districts included).

Second, following Calvi et al. (2022), we use the Digital Chart of the World and the

³However, direct colonial responsibility of education ended in 1919, when it got transferred to provincial governments.

⁴Some new districts that appear in 2011 Census have been carved by from two or more districts (as per Census 1991) as well. We dropped these Census 2011 districts as historical information for the Census 1991 districts could not be mapped for these districts.

CGIAR Consortium for Spatial Information and calculate two geographic variables to account for the geographic and climatic heterogeneity displayed by India. Specifically, we calculate the average altitude of each district, and an index of ruggedness of the terrain (based on the average change in altitude between adjacent 30" 30" grid-cells). Additionally, we compute the latitude and longitude of the centroid of the district. We also construct variable which indicates whether or not district is a coastal district equal to one for coastal districts (Rappaport and Sachs, 2003).

Third, we use data from the National Family Health Survey (NFHS) 2015-16. The NFHS, a nationwide cross-section demographic health survey for India, provides information on various topics such as population demographics, health and nutrition for India. It is conducted by the International Institute for Population Sciences (IIPS) in Mumbai administered under the Ministry of Health and Family Welfare (MoHFW), Government of India, and is a part of the global Demographic Health Survey (DHS) program.⁵ The NFHS 2015-16 survey was conducted between January 2015 and December 2016, and covered 601,509 households located throughout India. The sample was drawn using stratified random sampling (for more details on the survey methodology see International Institute for Population Sciences (IIPS) and ICF, 2017 and the online appendix).

The NFHS 2015-16 administered a separate woman's survey to collect information on all women aged 15-49 in the sampled households. The questionnaire included questions on background characteristics, reproduction, prevalence of hysterectomy, family planning, contacts with community health workers, maternal, child health, breast-feeding, nutrition, marriage, sexual activity, fertility preferences, husband's background, women's work, and women's empowerment, and domestic violence. However, questions on certain topics like domestic violence and menstrual hygiene were restricted to a subset of the eligible women.⁶ This is

⁵The DHS surveys for all countries are available at <https://dhsprogram.com/>

⁶These are the women who are from households belonging to the state module of the NFHS (which was implemented for a subsample of 15% of the households) since the domestic violence questionnaire was administered to a randomly selected woman from each household which was a part of the state module.

⁷Collecting valid and reliable data on domestic violence poses serious challenges due to the sensitivity of the issue and the consequent difficulties in collecting correct information, maintaining ethical concerns,

first source from which we draw our outcome variables, channel variables and demographic controls (see Table 1B for a list of these variables).

Finally, we make use of National Sample Survey (NSS) conducted by the National Sample Survey Organisation (NSSO) for information on employment and education status of females. NSS is a large household survey that is administered after every five years to collect household level information on consumption expenditure and individual level information on employment (in the past year) and education status. We use the latest survey round that has employment related information conducted in 2011-12 for our analysis. This is the second source from which we draw our outcomes, channel variables and demographics (see Table 1C for a list of these variables).

3.2 Analytical Samples

Using these sources of data, we create two analytical samples. We create the first analytical sample by merging the NFHS data with the district-level historical data and district-level geographic information (hereafter NFHS-based sample). The second analytical sample is created by merging the NSS data with the historical district level data on colonization regime and district level geographic information (hereafter NSS-based sample). We restrict our NFHS-based sample to only ever-married women since most of the outcomes from the NFHS are relevant only for them. To maintain parity with the NFHS-based sample, we

ensuring safety of the respondent and interviewer, as well as protecting the women who disclose violence. However, as noted by Golder et al. (2016, p. 2), “all these issues are well addressed in the NFHS surveys. It follows both Indian and international guidelines, viz. WHO ethical guidance for research on domestic violence against women, 2001, for the ethical collection of data on violence.” Specifically, the following precautions are taken by the survey. First, only one woman per household is selected (randomly) for the interviews. Second, the surveyors ensure that there is no one else in the room when the interviews were conducted. Third, the respondents are informed that their answers would be kept confidential. Fourth, women are asked the questions only toward the end of the interview so that a rapport has been built up between interviewer and respondent before the questions are posed. Fifth, interviewers are provided with extensive training regarding the appropriate way to ask questions of such a sensitive nature. Finally, the survey avoids generic and subjective questions on domestic violence and instead employs questions about specific episodes of violence. This procedure reflects a revised version of the Conflict Tactics Scales (Straus, 1979; Straus et al., 1996), and is considered by social scientists as the gold standard for survey data collection on domestic violence (Guarnieri and Rainer, 2021).

include only ever-married women in the NSS-based sample as well.⁸ This leaves us with 71,574 females in the NFHS-based sample, and 1,26,339 females in the NSS-based sample for our analysis.

The summary statistics for the historical and geographic characteristics of the districts included in our analysis, the NFHS-based sample and the NSS-based samples are presented in Tables 1A, 1B and 1C respectively. As for the outcomes, Table 1B shows that the proportion of ever married females in the NFHS who are employed in any kind of job is only 30% and the proportion of females employed in paid jobs is even lesser than that. More than half of the females report that their mobility is not restricted in at least one way, two-thirds of the female report to have at least some degree of financial autonomy, 86% report that they have some say in one or more kinds of household decision making, most women have some say in contraception use and in spending own-income (if they are in paid employment), more than 40% own a house alone or jointly, 32% own land alone or jointly, and 26% have been exposed to one or more types of IPV in the last twelve months. Turning to the potential channel variables (i.e., the primary variables through which historical regime might influence women empowerment), we find that the majority of the ever-married women and the husbands in our sample are literate, and years of schooling completed for the women as well as the husbands are very high (although husbands on average are 1.8 years more educated than their wives), the average age at marriage and age at first birth is above 18 although around 38% of them have married as a child, the average number of actual and ideal children are 2.3 and 2.6 respectively, 42% think IPV is justifiable while 28% of the husbands think so, and for 22% of the women the ideal number of boys is greater than that of girls. Finally, turning to the demographics we notice, the average age of women in the NFHS-based sample is 33 years, 23% are from upper castes, 82% are Hindus, around 20% of women belong each wealth quintile, and 29% reside in urban areas.

⁸We have carried out our analysis using the full NSS-based sample (which includes both married and unmarried married women) as well. The results (reported in Tables A1-A5 in the Appendix) are in line with the NSS-based sample which includes only ever-married women.

Turning to the outcomes of the ever married female in NSS 2011-12 reported in Table 1C, we find that around 25% of ever married female in NSS 2011-12 are currently in labour force (and also employed) but a vast majority of them are self employed with a very small percentage being in regular wage employment or employed as casual labour. This is true for their subsidiary employment as well. Around 9% of females have had vocational training, 54% have a MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act) job card and 87% have a savings bank account. As for the potential channel variable, we note that the average education level of married females is abysmally low at around 6 which corresponds to primary level of education (and is in line with the NFHS sample);⁹ only 9% have taken vocational education. The demographic variables show, the average age of women in the NSS-based sample is 41 years, 33% are from upper castes, 80% are Hindus, around 20% of women belong each wealth quintile, the average landownership of households of which women are part of is 821 hectares, and 36% reside in urban areas. Note, the representation of females across social groups and regions in both of our analytical samples closely resembles the representation of social groups and regions in the overall population.

4 Empirical Approach

4.1 Baseline Model

We begin by estimating the following equation using OLS:

$$Empowerment_{ids} = \alpha + \beta Colonization_{ds} + \gamma X_{ds} + \theta W_{ids} + \eta_s + \varepsilon_{ids} \quad (1)$$

where i denotes individuals, d denotes districts and s denotes states. *Colonization* denotes whether or not the district d in states s was under direct British rule; X is a vector of district

⁹The NSS does not collect information on years of education attained. The dependent variable in column 1 is a categorical variable taking a value between 1 (not literate) and 13 (post graduate and above) with increasing values indicating better education levels. Hence a coefficient estimate of 1 should be interpreted as one level and not one year.

characteristics (mainly geography); W is a vector of individual/household level controls, η_s denotes state fixed effects; ε_{ids} is idiosyncratic error term. We exclude various determinants of women’s empowerment such as educational attainment, age at marriage, attitudes towards gender norms, etc. from W as these are potentially endogenous variables that could be influenced by Colonization. These variables could also be the channels through which Colonization affects Empowerment. The coefficient β , which is our parameter of interest, thus captures the *total* effect of Colonization. We do check below whether the excluded variables indeed serve as channels.

Estimation of equation (1) using OLS may not indicate a causal effect of having direct British rule (in other words, β might be biased and inconsistent), because the covariate of interest, *Colonization*, is potentially endogenous. As discussed in Iyer (2010) and as can also be ascertained by looking at the geographic characteristics of the districts which the British annexed and which they did not, annexation by the British was not completely random. Districts under direct British rule had lower average altitude, and were less rugged suggesting that “British annexation policy was selective and geared toward picking out the areas that were likely to be more favorable to agriculture” (Iyer, 2010, p. 698). Such areas, compared to other areas, are also likely to have worse (unobserved) gender norms. Hansen et al. (2015) show that societies with longer history of agriculture have worse gender norms and consequently lower female labour force participation rates. The paper, using the timing of Neolithic Revolution (transition from hunter gatherer to agriculture societies) provide evidence of this. The mechanism highlighted is that exposure to agriculture increased the need for more children as helping hand on the field leading to increased pregnancies and lower participation of females in economic activity. Alesina et al. (2013) show that traditional farming practices have an adverse impact on gender norms and the perception about appropriate role of women in the society. The argument is that societies that historically practiced plough agriculture, as opposed to shifting agriculture, resulted in women and men specialising in production roles along gender lines. This division of labour generated norms

regarding economic participation of women. They provide evidence in support of their hypothesis using pre-industrial ethnographic data and contemporary measure of gender norms and female labour force participation.

Given that gender norms are generally thought to be sticky, if indeed the areas that the British annexed had relatively worse (unobserved) gender norms than the areas that the British did not annex, the OLS estimate of β , the effect of colonization of contemporaneous women's outcomes, would be biased downwards.

4.2 Identification Strategy

To circumvent this issue, and estimate the causal effect of *Colonization*, we use the instrumental variable (IV) strategy proposed by Iyer (2010). The IV strategy is based on a specific aspect of the British rule. Lord Dalhousie, governor-general of India from 1848 to 1856, articulated an unusual policy of annexation in 1848. As per the policy, if the ruler of a princely state dies without any natural heir (adopted children were not recognized as legal heir) the princely state would cease to be under the rule of the local king and would come under the British rule.

Lord Dalhousie used this policy to annex several states where Indian rulers died without a natural heir. Between 1848-1856, eight native states comprising 54 modern districts (or districts as per 2011 census) had rulers die without a natural heir during the governorship of Lord Dalhousie. Of these, four native states (Satara, Sambalpur, Jhansi, and Nagpur), comprising 25 modern districts were successfully annexed. The other four (29 modern districts) did not become part of the British Empire due to various reasons (see Iyer, 2010 for details).¹⁰ Of the remaining 65 native states (173 modern districts) where such a death did not occur, Lord Dalhousie annexed only 3 (23 modern districts), namely, Punjab, Berar, and Oudh.¹¹ The policy of lapse, therefore, meant that areas where the ruler died without

¹⁰It should be noted that in each of these cases, Lord Dalhousie recommended applying the policy of lapse, so the fact that these areas were ultimately not annexed was not a result of Dalhousie's selectively applying the policy of lapse but of factors beyond his control.

¹¹These were annexed by means of conquest, nonpayment of debt, and misrule, respectively.

a natural heir had a higher likelihood of being annexed.

Lord Dalhousie’s policy of Doctrine of Lapse was in sharp contrast to the policies followed by several earlier British administrators who recognized adoptions by native rulers. In fact, as discussed in Iyer (2010), rulers dying without natural heirs was not an unusual occurrence during this century. In the period 1835 to 1847, fifteen rulers died without natural heirs, but only one of these states was annexed. This meant that Dalhousie’s policy was an unexpected event for the native states; not surprisingly, it was extremely unpopular among the native rulers. Due to its unpopularity, this policy was withdrawn in 1858 when Company rule was succeeded by the British Raj under the British Crown. Official documents guaranteeing British recognition of adopted heirs were sent out to native rulers to reassure them against any future doctrines of lapse. This lends greater validity to the identifying assumption that the policy of Lapse provides an exogenous determinant of British annexation, since the death of a ruler without a natural heir in the specific period 1848 to 1856 is likely to be a matter of circumstance rather than caused by systematic factors that might also affect long-term outcomes.

Using this policy rule, we construct an IV *Lapse* as follows: *Lapse* equals 1 if the district was not annexed before 1848 and the ruler died without an heir in the period 1848 to 1856; *Lapse* equals 0 if the district was not annexed before 1848 and such a death did not occur during the period 1848 to 1856. *Lapse* cannot be assigned to places that were annexed before 1848, since these were already ruled by the British. Since the doctrine of lapse policy was irrelevant for places that were annexed before Lord Dalhousie came to India in 1848, the sample for the IV regressions necessarily consists of places that had not been annexed in or before 1847 (hereafter referred to as the post-1847 sample). The sample, therefore, consists of districts that were never annexed, those that were annexed due to lapse after 1847, and those that were annexed after 1847 by other means. Specifically, the post-1847 sample consists of 227 districts.¹² Employing *Lapse* as an IV for *Colonization* would yield

¹²Out of these 148 were historically part of princely states that were never annexed and the hereditary rulers of these princely states did not die without a natural heir between 1848-1856; 29 districts were

consistent estimates as long as $Lapse_{ds}$ itself does not have a direct impact on outcomes. The first-stage regression results presented in Table 2 show clearly that Lapse is positively correlated with Colonization. This confirms our previously made conjecture that the policy of lapse thus meant that areas where the ruler died without a natural heir had a higher probability of being annexed.

Colonial Legacy or Post-Independence Policies? Before concluding our discussion of the empirical approach, it is worth clarifying the an important issue: does our estimate of β really capture colonial legacy or we are just picking up the effect of post-independence policy differences across the districts? We believe there is little reason to suppose that our estimated β picks up the effect of post-independence policy differences across the districts. There are two reasons. First, we make use of state fixed effects in our regression specifications implying that we compare British and princely districts within the same state. Since India is a federal country and policies are formulated at the national and state level only, with minimal role of local government at least in the formulation stage, use of state fixed effect means that we use the variation in colonial institutions across districts that are exposed to same policy and legal environment after independence. Second, even if for argument's sake we assume that there are differences in post-independence policies across districts within the same state, we use an IV to estimate the causal effect of *Colonization*. As long as our IV is uncorrelated with post-independence district-level policies or events (which is likely to be the case), there is no reason to think that our results are driven by differences in post-independence policies across districts..

historically part of princely states whose hereditary rulers died without a natural heir between 1848-1856 but were never annexed by the British due to extraneous factors; 25 districts were historically part of princely states whose hereditary rulers did not die without a natural heir between 1848-1856 but were annexed by the British through other means (Actually 2 of these 25 districts were annexed in 1861); the remaining 25 districts were historically part of native states whose rulers died without natural heirs between 1848-1856 and consequentially were brought under the direct rule of the British through the Doctrine of Lapse. The sample does not include 325 districts from the full sample which were annexed before 1848.

5 Results

5.1 Main Results

The results of the regressions estimating the effect of British colonization on different measures of women empowerment are reported in Tables 3-13. Each table consists of 3 panels. In panel A, we present the OLS regression results for the full analytical sample; in panel B, we present the OLS regression results for the post-1847 sample or the IV sample (i.e., the sample consisting of individuals from districts that were not annexed before 1848); and, in panel C, we present the results of the regressions where Doctrine of Lapse is used as an instrument for British colonization.

5.1.1 Female Employment

The results of the regressions that use indicators of female employment as outcome variables from the NFHS-based sample are reported in Table 3. The OLS estimates for the full as well as post-1847 sample suggest that there British colonization is positively associated with women being employed in the preceding 12 months as well as women being employed in the preceding 12 months in *paid work* although the estimated the coefficients are not statistically significant for the post-1847 sample. However, since British colonization is likely to be endogenous implying that the OLS estimates are unlikely to be unbiased and consistent, we do not wish to draw any inferences based on these. The IV-2SLS estimates reported in Panel C, in contrast to the OLS, account for endogeneity. These indicate that likelihood of women being employed in the preceding 12 months and of being employed in the preceding 12 months in paid work is 5% and 5.5% higher, respectively, in British districts. Evidently, these estimates are more than twice as large as the OLS estimates reported in panel B.

The results of the regressions which use indicators of female employment as outcome variables from the NSS-based sample is reported in Table 4. The OLS estimates reported in panels A and B are positive albeit statistically insignificant. Turning to the IV-2SLS results,

we observe that the coefficients of British Colonization are still statistically insignificant but they are now almost four times larger as compared to OLS coefficients in Panel B suggesting that the use of the instrument corrects for the negative bias in the OLS estimation. Specifically, the IV-2SLS results suggest that likelihood that women participate in labour force and are employed are 4.5 and 4.6% point higher, respectively, in British districts (p values 0.19, 0.10, respectively). As can be seen, these results are in line with the IV-2SLS results obtained using the NFHS-based sample (in terms of direction as well as the magnitude of the estimated coefficients), and suggest that even after seven decades of independence from the colonial rule, the colonial legacy continues to have implications for female employment.

Given the evidence of increased likelihood of female employment in British districts, we delve deeper into the nature of employment in Table 5. We want to examine if the increased employment is on account of female employment in regular salaried jobs or self employment that also includes unpaid work on family enterprises. The detailed employment information available in the NSS allows us to do so. The IV-2SLS results suggest increase in the likelihood of women being employed in regular paid jobs and as casual labourers¹³ in districts that had direct British rule. We see a 2 and a 4% increase in the likelihood of females being employed as wage and casual labourers. Quantitatively, this amounts to 50 and 57% increase in the likelihood as compared to the average (Table 1C). This again points towards better contemporary employment outcomes for females in areas which were directly ruled by the British. The OLS results reported in Panels A and B also suggest increase in the likelihood of women being employed as casual labour and regular wage employment but the size of the coefficients are much smaller as compared to IV-2SLS regression coefficients.

We also examine the impact of British colonization on subsidiary employment for females – relatively short term employment that is pursued in addition to primary occupation in the last one year – using the NSS data. The results are reported in Table 6. Panel B shows decline in likelihood of self employment and increase in casual labour among females

¹³As per the NSS definition, casual labourers are engaged in public works or farm/non farm enterprises and get wages in return according to the periodic work contract.

in British districts. The OLS result on self employment are consistent with the IV-2SLS methodology (Panel C) but this specification additionally shows increase in likelihood of wage employment for females engaged in subsidiary employment.

5.1.2 Other Measures of Empowerment

We now proceed to examine the long term effect of British colonization on several other measures on women empowerment. The estimated effect of British colonization on different types mobility restrictions faced by women in the NFHS-based sample are reported in Table 7. The OLS results for the full sample indicate that, as compared to women in districts which were formerly princely states, women in British districts are likely to face lower mobility restrictions. The IV-2SLS estimates are in line with the OLS estimates but are significantly larger. Specifically, the IV-2SLS results indicate that compared to women in districts which were formerly princely states, women in British districts have 6.6 % higher likelihood of being allowed to go to the market alone, 6.4% higher likelihood of being allowed to go the health facility alone, almost 8% higher likelihood of being allowed to go somewhere outside the village alone, and 5% higher likelihood of going to any of these places alone (although the last estimate is not statistically significant).

Table 8 reports the results of the impact of British colonization on two measures of financial autonomy of females derived from the NFHS – has money that they can spend alone and has a bank account that they can operate alone. Note, having a bank account, in addition to being an indicator of financial autonomy, is an indicator of economic awareness and access to credit. The OLS estimates for the full sample as well as the post-1847 sample are positive although statistically insignificant (except the OLS estimate of the effect British colonization on whether the woman has autonomy in at least one respect based on the full sample). The IV-2SLS estimates are also positive. Moreover they are larger compared to the OLS estimates reported in Panel B. The IV-2SLS results suggests that compared to women in districts which were formerly Princely states, while women in British districts are not

more likely to have money that they can use alone, they are 10% more likely to have a bank account which they operate alone. Further, the latter are more than 6% more likely to have financial autonomy in at least one of the two measures of financial autonomy considered.

Women empowerment is closely related to women’s household decision making power. Are women in British districts relatively better off in terms of household decision making power? We examine this using the NFHS data; the results are reported in Table 9. The OLS results presented in panels A and C show that all measures of household decision making power are positively with British colonization. Further these associations are statistically significant. The IV-2SLS estimates of the British colonization coefficients are also positive and statistically significant, and are more than twice as large as the OLS estimates obtained using the post-1847 sample. The IV-2SLS results indicate that compared to their counterparts women in British districts are 4% more likely to have some say in decisions regarding own health care, 8% more likely to have some say in decisions regarding large household purchases, 7% more likely to have some say in decisions regarding visits of family/friends, and 6% more likely to have some say in how to spend husband’s earnings. Additionally, women in British districts are 4% more likely to have some say in at least one of the four household decisions considered than their counterparts.

Table 10 reports the regression results for two outcome variables (drawn from the NFHS) that are generally thought as important measures of women empowerment: decisions regarding contraception use and decisions regarding spending own income. The OLS estimates, for the full sample and for the post-1847 sample, are positive for both the outcome variables. However, in terms of magnitudes these are very small and are statistically insignificant. The IV-2SLS estimates, however, are significantly larger compared to the OLS estimates. They indicate that women in British districts are 3% more likely to have some say in decisions regarding contraception use, and 2% more likely to have some say in decisions regarding spending own income than other women (however, the last effect is imprecisely estimated).

The effect of British colonization on asset ownership of women using the NFHS-based

sample is reported in Table 11. These results are somewhat different from the other results. Specifically, the OLS regressions yield negative coefficients of British colonization. The IV-2SLS results are also negative. Additionally they are statistically insignificant.

Barring employment, NSS does not have a lot of information which can be used to construct women empowerment. Still we could look at the impact of British colonization on two outcome variables which can be viewed as measures of financial autonomy or economic awareness: whether the woman is a MGNREGA job card holder and whether the woman has a savings bank account (using the NFHS data we also looked at the impact of British colonization on women's likelihood of owning and operating a savings bank account). MGNREGA is an employment guarantee scheme that provides employment to rural population (above 18 years of age) for up to 100 days in a year at the prevailing minimum wage. Employment can be demanded under MGNREGA if the employee has registered for a job card and thus access to job card is an indicator of awareness about this scheme as well as the intention to seek work under it. The results are reported in Table 12. The OLS as well as the IV-2SLS estimates of British colonization are positive and statistically significant with the latter being substantially larger than the former. The IV-2SLS estimates suggest that for the NSS-based sample, women in districts that were directly ruled by the British are 19% more likely to hold a MGNREGA job card and 8% more likely to have a savings bank account than their counterparts.

5.1.3 Intimate Partner Violence

Next we turn to the results pertaining to IPV. Specifically, we examine whether women in districts which were directly ruled by the British are more or less likely to be exposed to IPV than women in districts which were never annexed by the British? Table 13 reports our findings. The OLS estimates indicate a negative association between British colonization and exposure to IPV, i.e., women in British districts are less likely to be exposed to all forms of IPV compared to women in other districts. The IV-2SLS estimates also are negative

and statistically significant (except for emotional violence); further, they are larger than the OLS estimates in terms of absolute magnitude. Quantitatively, as per the IV-2SLS estimates, women in British ruled districts are 6% less likely to face less severe IPV, 3% less likely to face severe IPV, 3% less likely to face sexual violence, 2% less likely to face emotional violence, and 7% less likely to face at least one type of violence.

The IPV results along with the employment results and results for other measures of women empowerment, therefore clearly indicate, *ceteris paribus*, women in districts which were historically under the British rule are more empowered than women in districts which were not under British rule.

5.2 Channels

Why are women more empowered in British-ruled districts compared to other districts? Are they more educated? Do they get married later? Do they have lower fertility? Do they have better gender attitudes? We attempt to answer these questions in this section. We start by examining the NFHS-based sample. As before we report the OLS and IV-2SLS results. However, the IV-2SLS estimates are the one that we wish to focus on in light of concerns of endogeneity regarding the OLS estimates. The results reported in Table 14 show that, in terms of education, compared to women in districts which were formerly Princely states, women in districts which were formerly under the British rule are 6% more likely to be literate and have 0.5 more years of schooling. Focusing on age at marriage, we see the women in British districts are likely to be more one year older during marriage and are 13% less likely to be married as a child (i.e., below the age of 18) than their counterparts. Turning to fertility, we see that women in British districts are likely to have 0.16 children lesser than their counterparts. Further, they are likely to report 0.8 children lesser as ideal number of children and are almost 0.7 years older during first child birth than other women. Finally, turning to gender attitudes, we see women in British districts are 4% less likely to indicate that for them the ideal number of boys is more than the ideal number of girls and

9% less likely to report that IPV is justifiable due to one or more reasons.

Husband's characteristics, in addition to women's own characteristics could be a determinant of women empowerment (e.g., women with husbands having better gender attitudes are likely to be more empowered). Thus we examine whether British rule had any long term effect on the husbands using the NFHS-based sample. The results reported in Table 15. We notice that husbands of women in British districts are 3% more likely to be literate than husbands of women in other districts. The former are also likely to have higher years of schooling and exhibit higher educational gap (between own and spousal education) although these are not statistically significant. Turning our attention from husbands' education to their gender attitudes we see husbands of women in British districts are 9% less likely to justify IPV due to one or more reasons, and 11% less likely to claim that only men should make household decisions.

The NSS-based sample, unlike the NFHS-based sample, does not allow us conduct such a detailed analysis of the potential pathways. However, for the NSS sample as well, we find that, compared to women in other districts, women in British districts are likely to be more educated (Table 16). Specifically, the IV-2SLS coefficient suggests that there is a almost one level difference in education of women between British districts and other districts. Given that the average education level for females is primary, a one level increase implies increased education to middle school. This implies considerable difference in education levels of women across districts with direct and indirect colonial rule. While, the effect of British rule on the likelihood of women taking vocational education is not statistically significant, it is worth noting that the coefficient positive and economically significant.

5.3 Comparison of OLS and IV results

As evident from the discussion above, our IV-2SLS estimates are almost always greater in terms of absolute magnitude than corresponding the OLS estimates suggesting that the OLS estimates of British colonization are downward biased. This is consistent with our

conjecture made in Section 4 that regions under direct British rule had systematically worse gender norms than other areas. However, it is also important to note that the local average treatment effect (LATE) interpretation of an instrumental variable estimate implies that we are estimating the causal effect of British colonization for the subpopulation of women who live in districts the historical colony status (whether or not they were annexed by the British) of which is affected by the instrument, i.e. Doctrine of Lapse. It is possible that causal effects for this subpopulation are larger than those for the population as a whole.

5.4 Differential Impact

In this section we address concerns that the documented positive impact of British colonial regime on contemporaneous female employment outcomes is driven by colonial policies that are favorable for employment in general and not necessarily female employment. In other words there could have been improvement in employment for males in British districts indicating absence of any gendered impact of the colonial policies. To examine if this is the case, we look at the differential impact of being in British districts on female employment, education and economic awareness. The OLS results for the full sample (Table 18) suggest that British colonization increases the labour force participation and employment rate for males and has a negative differential impact on females. But as discussed earlier the OLS coefficients are highly likely to be biased due to selective annexation of the districts and this selection could have a bearing on employment outcomes for females as well. We therefore focus on the IV-2SLS estimation results reported in Panel C. The results indicate that while females, on average, have a much lower likelihood of being employed or being in the labour force, this likelihood improves considerably in the British districts, as opposed to the OLS results. We also see that the impact of British colonization on employment and labour force participation is negative for males but the impact is positive for females. This result provides evidence that general improvement in employment does not seem to be the reason for the documented higher female employment in directly ruled British districts.

Results for the nature of employment, reported in Table 19, show that there is a negative differential impact on self employment for females, whereas the impact for males is positive. We, however do not find any differential impact of British colonization on the likelihood of females being employed as wage or casual labour.

The results for education are reported in Table 20. Both the OLS and IV-2SLS results show that on average females have lower education levels as compared to males. The table also shows that this gap in education is much less in British districts as compared to districts that were under indirect colonial rule. In other words, there is a positive differential impact of British colonization on female education levels. However, results are a bit puzzling for economic awareness (Table 21) where we see a negative differential impact on savings account for females and no impact on the likelihood of having a MGNREGA jobcard.

6 Conclusion

The paper documents the effect of British colonial rule on long run female economic outcomes in India. We identify the effect of British colonization by utilizing the Doctrine of Lapse policy of annexation of the East India Company as an instrument for British colonization. We show that females are more likely to be employed, have a say in household decision making and less likely to face mobility restrictions and IPV in districts that were historically under British rule. We also show that this improvement in socioeconomic outcomes for females is driven by better education outcomes for females, higher age at marriage and improved gender norms as measured by women’s and their spouses attitude towards the ideal number of children, preference for a son and IPV.

Our results highlight two things: One, legal changes have the potential to change the underlying social norms. We show positive legal reforms brought in by the colonial rulers improved the attitude towards social and economic participation of females as compared to areas where no such reforms took place. Two, there is persistence of social norms which

has important implications for outcomes in the long run. This suggests that it is possible to change attitudes and norms with carefully designed and strictly implemented legal changes. This is an important finding given that women continue to face constraints to their socioeconomic participation in society in many parts of the world, including India. Social norms, which are usually considered extremely difficult to change, have been considered as an important reason for this marginalization. This work shows that legal reforms can change these norms, the positive effects of which are likely to persist over centuries.

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Figure 1. Directly ruled British districts and princely states within the Indian Empire. Source: *Imperial Gazetteer Atlas of India*, Plate 20.

Table 1A. Summary Statistics (included Districts)

	N	Mean	SD
<i>Panel A: Covariate of Interest</i>			
British colonization (=1 if the district was under direct British rule)	552	0.679	0.467
<i>Panel B: Geographic/District-level Controls</i>			
Latitude	552	23.326	5.902
Longitude	552	79.839	5.042
Altitude	552	355.295	489.452
Ruggedness	552	0.047	0.111
Coast (=1 if coastal district)	552	0.111	0.314
<i>Panel C: Instrumental Variable</i>			
Ruler died without natural heir in 1848–1856	227	0.110	0.314

Notes: Districts refer to 2011 Census districts. The total number of Census districts was 640 in 2011. The analysis uses 552 districts from 23 major Indian states. The states of Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura, and the union territories of Andaman and Nicobar islands, Dadra and Nagar Haveli, Daman and Diu, Lakshwadeep, and Puducherry are excluded from the study. Latitude and longitude refers to latitude and longitude coordinates. Altitude is in meters. Ruggedness is based on the average change in altitude between adjacent 30×30 seconds grid-cells and then normalized between 0 and 100.

Table 1B. Summary Statistics (NFHS-based sample)

	N	Mean	SD
<i>Panel A: Outcomes</i>			
Employment			
Employed in the last twelve months (=1 if yes)	71574	0.304	0.460
Employed in the last 12 months in paid work (=1 if yes)	71574	0.245	0.430
Mobility Restrictions			
Allowed to go to market alone (=1 if yes)	71574	0.542	0.498
Allowed to go health facility alone (=1 if yes)	71574	0.502	0.500
Allowed to go to places outside village alone (=1 if yes)	71574	0.482	0.500
Allowed to go alone to any of the three places (=1 if yes)	71574	0.607	0.488
Financial Autonomy			
Has money which respondent alone can decide how to use (=1 if yes)	71574	0.422	0.494
Has bank account which respondent alone uses (=1 if yes)	71574	0.519	0.500
Has autonomy at least in one respect (=1 if yes)	71574	0.660	0.474
Household Decision Making			
Decisions regarding own health care (=1 if has at least some say)	71574	0.745	0.436
Decisions regarding large household purchases (=1 if has at least some say)	71574	0.728	0.445
Decisions regarding visits to family/relatives (=1 if has at least some say)	71574	0.739	0.439
Decisions regarding what to do with husband's earning (=1 if has at least some say)	69855	0.717	0.451
Any household decision (=1 if has at least some say in any household decision)	70879	0.863	0.344
Other miscellaneous decisions			
Has some say in decisions about contraception use (=1 if has at least some say)	38681	0.918	0.274
Has some say in decisions regarding spending of own income (=1 if has at least some say)	16581	0.816	0.388
Asset ownership			
Owns a house alone or jointly (=1 if yes)	71574	0.411	0.492
Owns land alone and jointly (=1 if yes)	71574	0.322	0.467
Exposure to IPV			
Less severe physical violence (=1 if exposed to in the last 12 months)	51344	0.221	0.415
Severe physical violence (=1 if exposed to in the last 12 months)	51344	0.064	0.244
Sexual violence (=1 if exposed to in the last 12 months)	51344	0.055	0.228
Emotional violence (=1 if exposed to in the last 12 months)	51344	0.105	0.307
Any violence (=1 if exposed to in the last 12 months)	51344	0.261	0.439
<i>Panel B: Channel Variables</i>			
Education			
Literate (=1 if yes)	71574	0.652	0.476
Years of education	71574	5.921	5.268
Marriage			
Age at marriage	70937	18.733	3.943
Child marriage (=1 if was married before turning 18)	70937	0.384	0.486
Fertility			
Number of children	71574	2.366	1.463
Ideal number of children	71574	2.622	5.486
Age at first child birth	64161	0.181	0.385
Gender norms			
IPV justifiable (=1 if IPV justifiable for at least one reason)	71206	0.420	0.494
Ideal number of boys > girls (=1 if yes)	71574	0.224	0.417
Husband's Education			
Literate (=1 if yes)	71405	0.809	0.393
Years of education	71405	7.683	5.006
Education gap (difference between wife's and husband's years of schooling)	71405	-1.758	4.299
Husband's Gender Norms			
IPV justifiable (=1 if IPV justifiable for at least one reason)	52330	0.287	0.452

Only men should be involved in household decision making (=1 if yes)	52571	0.406	0.491
<i>Panel C: Demographics</i>			
Age	71574	32.846	8.470
Caste			
Scheduled Caste (=1 if yes)	71574	0.197	0.398
Scheduled Tribe (=1 if yes)	71574	0.130	0.336
Other Backward Classes (=1 if yes)	71574	0.445	0.497
None of the above (=1 if yes)	71574	0.228	0.420
Religion			
Hindu (=1 if yes)	71574	0.829	0.377
Wealth			
Poorest	71574	0.196	0.397
Poorer	71574	0.204	0.403
Middle	71574	0.202	0.401
Richer	71574	0.195	0.397
Richest	71574	0.203	0.402
Urban (=1 if area of residence is urban)	71574	0.285	0.451

Table 1C. Summary Statistics (NSS-based sample)

	N	Mean	SD
<i>Panel A: Outcomes</i>			
Employment			
Currently working (=1 if yes)	125769	0.25	0.43
In labor force (=1 if yes)	125769	0.25	0.43
Self employed (=1 if yes)	125769	0.14	0.34
Wage employee (=1 if yes)	125769	0.04	0.20
Casual labor (=1 if yes)	125769	0.07	0.25
Self employed subsidiary (=1 if yes)	126339	0.12	0.33
Wage employee subsidiary (=1 if yes)	126339	0.00	0.04
Casual labor subsidiary (=1 if yes)	126339	0.05	0.22
Other measures of empowerment			
MGNREG job card (=1 if yes)	27979	0.54	0.50
Saving account (=1 if yes)	28233	0.87	0.33
<i>Panel B: Channel</i>			
General Education	29105	6.37	3.43
Vocational (=1 if taken)	29105	0.09	0.29
<i>Panel C: Demographics</i>			
female (=1 if yes)	431653	0.48	0.50
Age	126339	41.30	14.70
Caste			
Scheduled Caste (=1 if yes)	126339	0.17	0.37
Scheduled Tribe (=1 if yes)	126339	0.08	0.26
Other Backward Classes (=1 if yes)	126339	0.42	0.49
Religion			
Hindu (=1 if yes)	126339	0.80	0.40
Household Asset Ownership (land Owned in hectares)	114656	821.89	2003.53
Urban (=1 if yes)	126339	0.36	0.48

Table 2. Effect of Ruler's s dying without natural heir in 1848-56 on British Colonization

	[1]	[2]	[3]
Ruler died without natural heir in 1848–1856	0.876*** (0.078)	0.779*** (0.143)	0.774*** (0.136)
Latitutde		0.014 (0.010)	0.016 (0.020)
Longitude		0.025 (0.025)	0.018 (0.018)
Altitude		-0.000 (0.000)	-0.000 (0.000)
Ruggedness		-0.202 (0.185)	0.059 (0.079)
Coast		0.013 (0.107)	-0.156*** (0.053)
State Fixed Effects	N	Y	Y
N	227	227	227
R square	0.438	0.522	0.772

Notes: Robust standard error in parenthesis, corrected for clustering within states.

*Significant at

10%.

**Significant at 5%.

***Significant at 1%.

Table 3. Effect of British Colonization on Female Employment (NFHS data)

	Employed in the last 12 months	Employed in the last 12 months in paid work
Panel A: OLS (Full sample)		
British Colonization	0.022* (0.012)	0.016* (0.010)
N	71,574	71,574
R square	0.119	0.101
Panel B: OLS (Post-1847 sample)		
British Colonization	0.017 (0.018)	0.021 (0.018)
N	29,509	29,509
R square	0.134	0.110
Panel C: IV (Post-1847 Sample)		
British Colonization	0.049* (0.030)	0.055** (0.024)
First Stage F	111.90	111.90
N	29,509	29,509
R square	0.134	0.109

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Table 1A and 1B for the list of individual characteristics and geographic characteristics). Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table 4. Effect of British Colonization on Female Employment (NSS data)

	Currently working	In labour force
Panel A: OLS (Full sample)		
British Colonization	0.013 (0.016)	0.012 (0.016)
N	114,141	114,141
R square	0.174	0.175
Panel B: OLS (Post-1847 sample)		
British Colonization	0.009 (0.029)	0.008 (0.029)
N	46,359	46,359
R square	0.168	0.169
Panel C: IV (Post-1847 sample)		
British Colonization	0.045 (0.035)	0.046 (0.035)
N	46,359	46,359
R square	0.168	0.168

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Table 1A and 1C for the list of individual characteristics and geographic characteristics). These regressions exclude individuals that are currently studying. Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table 5. Effect of British Colonization on Regular Female Employment (NSS data)

	Self Employed	Wage Employee	Casual Labour
Panel A: OLS (Full sample)			
British Colonization	-0.003 (0.012)	-0.001 (0.003)	0.017** (0.008)
N	114,141	114,141	114,141
R square	0.136	0.028	0.104
Panel B: OLS (Post-1847 sample)			
British Colonization	-0.013 (0.023)	0.013*** (0.004)	0.009 (0.015)
N	46,359	46,359	46,359
R square	0.140	0.037	0.087
Panel C: IV (Post-1847 sample)			
British Colonization	-0.008 (0.031)	0.017** (0.007)	0.037* (0.019)
N	46,359	46,359	46,359
R square	0.140	0.037	0.086

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Table 1A and 1C for the list of individual characteristics and geographic characteristics). These regressions exclude individuals that are currently studying. Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table 6. Effect of British Colonization on Female Subsidiary Employment (NSS data)

	Self Employed	Wage Employee	Casual Labour
Panel A: OLS (Full sample)			
British Colonization	-0.034** (0.013)	0.000 (0.000)	0.005 (0.007)
N	114,656	114,656	114,656
R square	0.089	0.003	0.078
Panel B: OLS (Post-1847 sample)			
British Colonization	-0.062** (0.026)	0.001 (0.001)	0.019* (0.011)
N	46,566	46,566	46,566
R square	0.122	0.004	0.060
Panel C: IV (Post-1847 sample)			
British Colonization	-0.080*** (0.030)	0.017** (0.007)	0.011 (0.019)
N	46,566	46,359	46,566
R square	0.122	0.037	0.060

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Tables 1A and 1C for the list of individual characteristics and geographic characteristics). These regressions exclude individuals that are currently studying. Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table 7. Effect of British Colonization on Female Mobility Restrictions

	Allowed to go to market alone	Allowed to go health facility alone	Allowed to go to places outside village alone	Allowed to go alone to any of the three places
Panel A: OLS (Full sample)				
British Colonization	0.027** (0.012)	0.025** (0.011)	0.026** (0.011)	0.022* (0.012)
N	71,574	71,574	71,574	71,574
R square	0.121	0.117	0.106	0.117
Panel B: OLS (Post-1847 sample)				
British Colonization	0.024 (0.025)	0.028 (0.025)	0.049** (0.021)	0.022 (0.024)
N	29,509	29,509	29,509	29,509
R square	0.112	0.109	0.101	0.104
Panel C: IV (Post-1847 Sample)				
British Colonization	0.066** (0.033)	0.064** (0.032)	0.078*** (0.028)	0.052 (0.033)
First Stage F	111.90	111.90	111.90	111.90
N	29,509	29,509	29,509	29,509
R square	0.111	0.109	0.101	0.103

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Tables 1A and 1B for the list of individual characteristics and geographic characteristics). Robust standard error in parenthesis, corrected for clustering within districts.

10%.

**Significant at 5%.

***Significant at 1%.

*Significant at

Table 8. Effect of Colonialism on Female Financial Autonomy

	Has money which respondent alone can decide how to use	Has bank account which respondent alone uses	Has autonomy at least in one respect
Panel A: OLS (Full sample)			
British Colonization	0.021 (0.013)	0.008 (0.012)	0.021* (0.011)
N	71,574	71,574	71,574
R square	0.060	0.117	0.078
Panel B: OLS (Post-1847 sample)			
British Colonization	0.005 (0.018)	0.021 (0.022)	0.014 (0.020)
N	29,509	29,509	29,509
R square	0.069	0.117	0.084
Panel C: IV (Post-1847 Sample)			
British Colonization	0.008 (0.021)	0.097*** (0.033)	0.063** (0.028)
First Stage F	111.90	111.90	111.90
N	29,509	29,509	29,509
R square	0.069	0.115	0.083

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Tables 1A and 1B for the list of individual characteristics and geographic characteristics). Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table 9. Effect of British Colonization on Women's Household Decision Making Power

	Decisions regarding own health care	Decisions regarding large household purchases	Decisions regarding visits to family/relatives	Decisions regarding what to do with husband's earning	Has some say in at least any one decision
Panel A: OLS (Full sample)					
British Colonization	0.018* (0.010)	0.021** (0.010)	0.024** (0.010)	0.027*** (0.010)	0.024*** (0.008)
N	71,574	71,574	71,574	69,855	70,879
R square	0.029	0.033	0.038	0.025	0.027
Panel B: OLS (Post-1847 sample)					
British Colonization	0.010 (0.015)	0.039*** (0.014)	0.033** (0.017)	0.036** (0.015)	0.024** (0.012)
N	29,509	29,509	29,509	28,796	29,238
R square	0.027	0.030	0.031	0.025	0.026
Panel C: IV (Post-1847 Sample)					
British Colonization	0.040** (0.020)	0.084*** (0.020)	0.071*** (0.024)	0.060*** (0.017)	0.044*** (0.015)
First Stage F	111.90	111.90	111.90	113.30	112.70
N	29,509	29,509	29,509	28,796	29,238
R square	0.027	0.030	0.031	0.025	0.025

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Tables 1A and 1B for the list of individual characteristics and geographic characteristics). Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table 10. Effect of British Colonization on Women's Miscellaneous Decision Making

	Decisions about contraception use	Decisions regarding spending of own income
Panel A: OLS (Full sample)		
British Colonization	0.003 (0.007)	0.019 (0.013)
N	38,681	16,581
R square	0.012	0.036
Panel B: OLS (Post-1847 sample)		
British Colonization	0.008 (0.011)	0.004 (0.021)
N	16,673	7,320
R square	0.013	0.047
Panel C: IV (Post-1847 Sample)		
British Colonization	0.028* (0.014)	0.019 (0.025)
First Stage F	133.30	127.90
N	16,673	7,320
R square	0.013	0.047

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Tables 1A and 1B for the list of individual characteristics and geographic characteristics). Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table 11. Effect of British Colonization on Women's Asset Ownership

	Alone or jointly owns any house	Alone or jointly owns any land
Panel A: OLS (Full sample)		
British Colonization	-0.030 (0.018)	-0.026* (0.015)
N	71,574	71,574
R square	0.078	0.067
Panel B: OLS (Post-1847 sample)		
British Colonization	-0.026 (0.029)	-0.019 (0.024)
N	29,509	29,509
R square	0.062	0.052
Panel C: IV (Post-1847 Sample)		
British Colonization	-0.030 (0.038)	-0.030 (0.035)
First Stage F	111.90	111.90
N	29,509	29,509
R square	0.062	0.052

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Tables 1A and 1B for the list of individual characteristics and geographic characteristics). Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table 12. Effect of British Colonization on Economic Awareness (NSS data)

	NREGS job card	Savings account
Panel A: OLS (Full sample)		
British Colonization	0.021 (0.021)	0.018 (0.015)
N	27,714	27,510
R square	0.332	0.157
Panel A: OLS (Post-1847 sample)		
British Colonization	0.121*** (0.041)	0.042 (0.033)
N	12,428	12,376
R square	0.304	0.091
Panel A: IV (Post-1847 sample)		
British Colonization	0.187*** (0.051)	0.077* (0.042)
N	12,239	12,376
R square	0.306	0.090

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Tables 1A and 1C for the list of individual characteristics and geographic characteristics). The sample is restricted to individuals who are 18 years and older. Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table 13. Effect of British Colonization on Women's Exposure to IPV

	Less Severe Physical Violence	Severe Physical Violence	Sexual Violence	Emotional Violence	Any Violence
Panel A: OLS (Full sample)					
British Colonization	-0.023*** (0.008)	-0.003 (0.004)	-0.007* (0.004)	-0.007 (0.006)	-0.022** (0.009)
N	51,344	51,344	51,344	51,344	51,344
R square	0.073	0.036	0.022	0.033	0.076
Panel B: OLS (Post-1847 sample)					
British Colonization	-0.042*** (0.013)	-0.012 (0.007)	-0.015** (0.006)	0.003 (0.009)	-0.038*** (0.015)
N	21,205	21,205	21,205	21,205	21,205
R square	0.064	0.034	0.018	0.025	0.066
Panel C: IV (Post-1847 Sample)					
British Colonization	-0.056*** (0.018)	-0.024** (0.009)	-0.034*** (0.009)	-0.020 (0.013)	-0.067*** (0.020)
First Stage F	120.50	120.50	120.50	120.50	120.50
N	21,205	21,205	21,205	21,205	21,205
R square	0.064	0.034	0.017	0.025	0.066

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Tables 1A and 1B for the list of individual characteristics and geographic characteristics). Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table 14. Mechanisms: Own Characteristics (NFHS-based sample)

	Education		Marriage		Fertility			Gender Attitudes	
	Literacy	Years of Education	Age at Marriage	Child Marriage	Number of Children	Ideal number of Children	Age at first child birth	Ideal number of boys > girls	IPV justifiable
Panel A: OLS (Full sample)									
British Colonization	0.035*** (0.010)	0.178 (0.126)	0.179 (0.114)	-0.021* (0.011)	-0.048* (0.025)	0.027 (0.028)	0.027 (0.096)	-0.016** (0.007)	-0.021* (0.013)
N	71,574	71,574	70,937	70,937	71,574	71,335	64,557	71,574	71,206
R square	0.329	0.448	0.148	0.110	0.387	0.187	0.087	0.088	0.108
Panel B: OLS (Post-1847 sample)									
British Colonization	0.062*** (0.017)	0.737*** (0.174)	0.886*** (0.191)	-0.095*** (0.023)	-0.127*** (0.044)	-0.030 (0.032)	0.564*** (0.122)	-0.036*** (0.011)	-0.030 (0.021)
N	29,509	29,509	29,142	29,142	29,509	29,418	26,630	29,509	29,340
R square	0.344	0.470	0.179	0.129	0.376	0.191	0.109	0.072	0.099
Panel C: IV (Post-1847 Sample)									
British Colonization	0.061*** (0.021)	0.535** (0.254)	1.147*** (0.268)	-0.127*** (0.031)	-0.163** (0.064)	-0.083 (0.051)	0.684*** (0.194)	-0.037** (0.015)	-0.092*** (0.030)
First Stage F	111.90	111.90	113.10	113.10	111.90	111.40	112.80	111.90	111.60
N	29,509	29,509	29,142	29,142	29,509	29,418	26,630	29,509	29,340
R square	0.344	0.470	0.179	0.129	0.376	0.191	0.109	0.072	0.098

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Tables 1A and 1B for the list of individual characteristics and geographic characteristics). Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table 15. Mechanisms: Husband's Characteristics (NFHS-based sample)

	Education			Gender Attitudes	
	Literacy	Years of Education	Education Gap	IPV Justifiable	Only Men should make household decisions
Panel A: OLS (Full sample)					
British Colonization	0.015* (0.008)	-0.039 (0.119)	0.217** (0.089)	-0.037** (0.015)	-0.035** (0.016)
N	71,405	71,405	71,405	52,330	52,571
R square	0.184	0.341	0.085	0.078	0.034
Panel B: OLS (Post-1847 sample)					
British Colonization	0.024** (0.011)	0.302* (0.157)	0.430** (0.173)	-0.047* (0.027)	-0.011 (0.030)
N	29,442	29,442	29,442	22,384	22,460
R square	0.200	0.360	0.087	0.092	0.040
Panel C: IV (Post-1847 Sample)					
British Colonization	0.025* (0.013)	0.164 (0.203)	0.364 (0.251)	-0.094*** (0.029)	-0.113** (0.048)
First Stage F	111.60	111.60	111.60	125.40	125.70
N	29,442	29,442	29,442	22,384	22,460
R square	0.200	0.360	0.087	0.091	0.037

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Tables 1A and 1B for the list of individual characteristics and geographic characteristics). Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table 16. Mechanisms: Own Characteristics (NSS-based sample)

	General Education	Vocational Education
Panel A: OLS (Full sample)		
British Colonization	0.187 (0.120)	-0.000 (0.014)
N	25,776	114,656
R square	0.215	0.634
Panel B: OLS (Post-1847 sample)		
British Colonization	0.619*** (0.230)	0.006 (0.023)
N	10,287	46,566
R square	0.238	0.593
Panel C: IV (Post-1847 sample)		
British Colonization	0.827** (0.343)	0.040 (0.027)
N	10,287	46,566
R square	0.238	0.592

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Tables 1A and 1C for the list of individual characteristics and geographic characteristics). These regressions exclude individuals that are currently studying. Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table 17. Differential Effect of British Colonization on Female Employment

	Currently working	In labour force
Panel A: OLS (Full sample)		
British Colonization	0.030*** (0.011)	0.032*** (0.011)
British ColonizationXfemale	-0.049** (0.019)	-0.052*** (0.019)
female	-0.628*** (0.016)	-0.626*** (0.017)
N	215,637	215,637
R square	0.531	0.532
Panel B: OLS (Post-1847 Sample)		
British Colonization	0.022 (0.018)	0.025 (0.018)
British ColonizationXfemale	-0.040 (0.031)	-0.044 (0.031)
female	-0.628*** (0.016)	-0.627*** (0.017)
N	87,255	87,255
R square	0.507	0.508
Panel C: IV (Post-1847 Sample)		
British Colonization	-0.039* (0.021)	-0.036* (0.021)
British ColonizationXfemale	0.110*** (0.036)	0.105*** (0.036)
female	-0.662*** (0.019)	-0.660*** (0.019)
Observations	87,255	87,255
R-squared	0.503	0.504

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Table 1A and 1C for the list of individual characteristics and geographic characteristics). These regressions exclude individuals that are currently studying.

Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table 18. Differential Effect of British Colonization on Female Employment

	Self Employed	Wage Employee	Casual Labour
Panel A: OLS (Full sample)			
British Colonization	0.014 (0.011)	-0.006 (0.007)	0.022** (0.010)
British ColonizationXfemale	-0.043*** (0.017)	0.013 (0.008)	-0.018 (0.011)
female	-0.346*** (0.014)	-0.142*** (0.006)	-0.140*** (0.010)
N	215,637	215,637	215,637
R square	0.227	0.101	0.136
Panel B: OLS (Post-1847 Sample)			
British Colonization	0.015 (0.019)	-0.001 (0.009)	0.009 (0.017)
British ColonizationXfemale	-0.063*** (0.024)	0.023** (0.010)	0.001 (0.019)
female	-0.346*** (0.014)	-0.142*** (0.006)	-0.140*** (0.010)
N	87,255	87,255	87,255
R square	0.220	0.103	0.126
Panel C: IV (Post-1847 Sample)			
British Colonization	-0.059** (0.026)	0.025* (0.014)	-0.005 (0.021)
British ColonizationXfemale	0.044 (0.030)	-0.003 (0.013)	0.069*** (0.019)
female	-0.370*** (0.016)	-0.136*** (0.007)	-0.156*** (0.011)
Observations	87,255	87,255	87,255
R-squared	0.218	0.102	0.124

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Table 1A and 1C for the list of individual characteristics and geographic characteristics). These regressions exclude individuals that are currently studying. Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table 19. Differential Effect of British Colonization on Female Subsidiary Employment

	Self Employed	Wage Employee	Casual Labour
Panel A: OLS (Full sample)			
British Colonization	0.003 (0.010)	0.001** (0.000)	0.003 (0.006)
British ColonizationXfemale	-0.044*** (0.014)	-0.001 (0.000)	-0.002 (0.006)
female	0.032*** (0.012)	-0.000 (0.000)	-0.010** (0.004)
N	216,553	216,553	216,553
R square	0.072	0.001	0.057
Panel B: OLS (Post-1847 Sample)			
British Colonization	-0.003 (0.017)	0.000 (0.001)	0.014 (0.011)
British ColonizationXfemale	-0.047** (0.020)	-0.000 (0.001)	-0.013* (0.007)
female	0.032*** (0.012)	-0.000 (0.000)	-0.010** (0.004)
N	87,644	87,644	87,644
R square	0.095	0.002	0.052
Panel C: IV (Post-1847 Sample)			
British Colonization	0.006 (0.025)	0.001 (0.001)	-0.005 (0.019)
British ColonizationXfemale	-0.101*** (0.018)	-0.000 (0.001)	-0.003 (0.008)
female	0.044*** (0.013)	-0.000 (0.000)	-0.012** (0.005)
Observations	87,644	87,644	87,644
R-squared	0.094	0.002	0.052

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Tables 1A and 1C for the list of individual characteristics and geographic characteristics). These regressions exclude individuals that are currently studying. Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table 20. Differential Effect of British Colonization on Female Education

	General Education	Vocational
Panel A: OLS (Full sample)		
British Colonization	-0.105 (0.127)	0.012 (0.022)
British ColonizationXfemale	0.381*** (0.114)	0.002 (0.015)
female	-1.092*** (0.097)	-0.114*** (0.012)
N	39,086	39,086
R square	0.184	0.094
Panel B: OLS (Post-1847 Sample)		
British Colonization	0.267 (0.228)	0.018 (0.036)
British ColonizationXfemale	0.357** (0.176)	-0.015 (0.024)
female	-1.124*** (0.099)	-0.114*** (0.012)
N	15,732	15,732
R square	0.207	0.111
Panel C: IV (Post-1847 Sample)		
British Colonization	0.123 (0.334)	0.060 (0.066)
British ColonizationXfemale	0.772*** (0.219)	-0.062 (0.044)
female	-1.222*** (0.113)	-0.103*** (0.014)
Observations	15,732	15,732
R-squared	0.206	0.110

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Tables 1A and 1C for the list of individual characteristics and geographic characteristics). These regressions exclude individuals that are currently studying. Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table 21. Differential Effect of British Colonization on Economic Awareness

	NREGS job card	Savings account
Panel A: OLS (Full sample)		
British Colonization	0.087*** (0.025)	0.026* (0.016)
British ColonizationXfemale	-0.113*** (0.042)	-0.011*** (0.003)
female	-0.130*** (0.033)	0.009*** (0.002)
N	51,781	52,081
R square	0.203	0.142
Panel B: OLS (Post-1847 Sample)		
British Colonization	0.184*** (0.037)	0.052 (0.034)
British ColonizationXfemale	-0.206*** (0.051)	-0.012** (0.005)
female	-0.130*** (0.033)	0.009*** (0.002)
N	23,250	23,412
R square	0.207	0.083
Panel C: IV (Post-1847 Sample)		
British Colonization	0.149*** (0.041)	0.080* (0.042)
British ColonizationXfemale	-0.047 (0.050)	-0.012* (0.006)
female	-0.163*** (0.035)	0.009*** (0.003)
Observations	23,250	23,412
R-squared	0.201	0.082

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Table 1A and 1C for the list of individual characteristics and geographic characteristics). The sample is restricted to individuals who are 18 years and older. Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table A1. Effect of British Colonization on Female Employment (All)

	Currently working	In labour force
Panel A: OLS (Full sample)		
British Colonization	0.014 (0.015)	0.013 (0.015)
N	127,323	127,323
R square	0.159	0.156
Panel A: OLS (Post-1847 sample)		
British Colonization	0.016 (0.028)	0.017 (0.028)
N	51,526	51,526
R square	0.154	0.150
Panel A: IV (Post-1847 sample)		
British Colonization	0.054 (0.034)	0.057 (0.035)
N	51,526	51,526
R square	0.153	0.149

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Tables 1A and 1C for the list of individual characteristics and geographic characteristics). These regressions exclude individuals that are currently studying. Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table A2. Effect of British Colonization on Female Employment (All)

	Self Employed	Wage Employee	Casual Labour
Panel A: OLS (Full sample)			
British Colonization	-0.003 (0.010)	0.000 (0.003)	0.015** (0.007)
N	140,825	140,825	140,825
R square	0.129	0.034	0.098
Panel A: OLS (Post-1847 sample)			
British Colonization	-0.010 (0.020)	0.000 (0.003)	0.010 (0.013)
N	56,925	140,825	56,925
R square	0.135	0.034	0.083
Panel A: IV (Post-1847 sample)			
British Colonization	-0.004 (0.028)	0.017*** (0.006)	0.033** (0.016)
N	56,925	56,925	56,925
R square	0.135	0.040	0.083

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Tables 1A and 1C for the list of individual characteristics and geographic characteristics). These regressions exclude individuals that are currently studying. Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table A3. Effect of British Colonization on Subsidiary Female Employment (All)

	Self Employed	Wage Employee	Casual Labour
Panel A: OLS (Full sample)			
British Colonization	-0.024** (0.009)	0.000 (0.000)	0.003 (0.005)
N	185,082	185,082	185,082
R square	0.098	0.002	0.068
Panel A: OLS (Post-1847 sample)			
British Colonization	-0.045** (0.018)	0.001 (0.000)	0.010 (0.007)
N	74,793	74,793	74,793
R square	0.132	0.004	0.057
Panel A: IV (Post-1847 sample)			
British Colonization	-0.058*** (0.022)	0.002*** (0.001)	0.005 (0.012)
N	74,793	74,793	74,793
R square	0.132	0.004	0.057

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Table 1A and 1C for the list of individual characteristics and geographic characteristics). These regressions exclude individuals that are currently studying. Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table A4. Effect of British Colonization on Economic Awareness (All)

	NREGS job card	Savings account
Panel A: OLS (Full sample)		
British Colonization	0.025 (0.020)	0.019 (0.015)
N	30,300	30,080
R square	0.335	0.155
Panel A: OLS (Post-1847 sample)		
British Colonization	0.105*** (0.040)	0.043 (0.034)
N	13,567	13,513
R square	0.316	0.092
Panel A: IV (Post-1847 sample)		
British Colonization	0.168*** (0.051)	0.079* (0.043)
N	13,352	13,513
R square	0.317	0.091

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Tables 1A and 1C for the list of individual characteristics and geographic characteristics). The sample is restricted to individuals who are 18 years and older. Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.

Table A5. Effect of British Colonization on Female Education (All)

	General Education	Vocational
Panel A: OLS (Full sample)		
British Colonization	0.175 (0.115)	0.001 (0.010)
N	37,894	185,082
R square	0.284	0.793
Panel A: OLS (Post-1847 sample)		
British Colonization	0.612*** (0.208)	0.006 (0.017)
N	15,059	74,793
R square	0.291	0.761
Panel A: IV (Post-1847 sample)		
British Colonization	0.834*** (0.320)	0.034* (0.020)
N	15,059	74,793
R square	0.290	0.761

Notes: All regressions include controls for individual characteristics, geographic/district-level characteristics, and state fixed effects (see Table 1A and 1C for the list of individual characteristics and geographic characteristics). These regressions exclude individuals that are currently studying. Robust standard error in parenthesis, corrected for clustering within districts.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.