

The Intergenerational Effects of Marital Transfers: Evidence from India

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Abstract

We study the intergenerational effects of marital transfers in India. We use exogenous variation in dowry amounts induced by stronger anti-dowry laws introduced in 1985. The new legal regime reduced dowries substantially and increased domestic violence against women. We find that children born to mothers exposed to the reform have a 0.24 standard deviation lower height-for-age z -score and about 0.41 fewer years of completed schooling. These results are plausibly driven by increased domestic violence against mothers and lower household wealth on account of reduced dowries.

JEL Classification: D13, I15, I25, J12, K36, O15

Keywords: Dowry, marriage, intergenerational, education, health, nutrition, early childhood, India

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1 Introduction

The institution of marriage has been fundamental to family formation in most societies (Becker (1991)). In many contexts, a sum (in cash or kind) is transferred either from the bride to the groom (i.e., dowry) or from the groom to the bride (i.e., bride price) at the time of marriage (Anderson (2007)). A growing literature documents that anticipated marital transfers affect intra-household decisions such as intertemporal consumption-saving choices (Anukriti et al. (2022a)) and investment in children (Ashraf et al. (2020)). Marital transfers have also been shown to alter the bargaining power of the recipient in her marital home (Brown (2009)). However, the intergenerational effects of marital transfers have remained largely unexplored.

In this paper, we study the effect of marital transfers received by the mother on the health and educational attainments of her children. The context of our study is India, where the typical marital transfer is a large sum of dowry, often amounting to 5-8 times the annual household income (Rao (1993a), Anderson (2007)). Indian marriages are mostly patrilocal, so the newlywed woman moves in with her husband and in-laws. The amount of dowry she brings along could affect her bargaining power and her chance of being subjected to domestic violence in her marital home (Brown (2009), Calvi and Keskar (2021b)). Her experience of domestic violence could, in turn, affect not just her own welfare but also have consequences on her children's health and education (Aizer (2011), La Mattina (2017)).

We exploit a plausibly exogenous reduction in dowry amounts induced by an amendment to the Dowry Prohibition Act (1961). The amended act, along with a fresh set of rules (referred to as the Dowry Prohibition Rules), came into effect in 1985. The new legal regime strengthened the existing anti-dowry provisions of the law by increasing the punishment (fine and prison term) for receiving dowry.¹ The amendment and the new rules applied to Hindus but not to Muslims. Recent econometric analyses confirm that these newly introduced rules reduced dowry payments by about 45% of the annual household income (Alfano (2017)) and increased domestic violence against women (Calvi and Keskar (2021b)).

Our empirical strategy employs a difference-in-differences framework that exploits variation in exposure to treatment (i.e., strengthening of anti-dowry laws in 1985) by religion and timing of mother's marriage. Since Hindu women who married after 1985 brought lower dowries into their marital homes, the children of this group of women comprise the treated group after treatment. Hindu children whose mothers married before 1985 comprise the treated group prior to treatment. Muslims make up the pure control group.

We find that children of mothers who were exposed to stronger anti-dowry laws introduced in 1985 were shorter by about 0.24 standard deviations as compared to their peers in early

¹The practice of dowry was outlawed by the Dowry Prohibition Act (1961). However, this piece of legislation failed to curb the practice, and dowry amounts continued rising in the ensuing decades. It was in a bid to check rising dowries that the Government of India strengthened the anti-dowry law by amending the original Dowry Prohibition Act (1961) and implementing the Dowry Prohibition Rules in 1985.

childhood. When this cohort of children attained schoolgoing age, they fell behind their peers in terms of educational attainment. Children whose mothers were exposed to the reform had about 0.41 fewer years of completed education as compared to their peers (of the same age) who were born to mothers who were not exposed to the reform. We conduct event studies to validate these results. Further, the result is robust to alternative measurements of the outcome variable, such as using a threshold-based measure like stunting instead of height-for-age, and measuring education in terms of standardized years of schooling and primary school completion. Interestingly, heterogeneity analyses by gender reveal that the reduction in age-appropriate height and completed years of schooling was higher for boys as compared to the corresponding reduction for girls. Further, the effect of the reform on educational outcomes was higher amongst the higher castes that customarily pay higher dowries (Rao (1993a), Srinivasan and Lee (2004)), and would, therefore, have found the new legal regime to be a binding constraint.

Turning to mechanisms, one can think of at least two channels mediating our results. First, mothers who bring in lower dowries have lower bargaining power (Zhang and Chan (1999), Brown (2009), Calvi and Keskar (2021a)), and are likelier to be subjected to domestic violence (Calvi and Keskar (2021b)). Mothers' exposure to domestic violence could make the household less efficient as an economic unit (Lewbel and Pendakur (2022)), and result in worse educational and health outcomes for children (see Aizer (2011), La Mattina (2017) for instance).² A second channel through which a lower dowry amount brought by the mother at the time of her marriage may affect children's educational attainment is via household wealth. A reduced dowry may result in a lower wealth in the marital home of the woman, and this may affect her children's outcome. We provide suggestive evidence that this channel is in operation.

This paper makes two contributions to the literature. First, a rich literature has studied the intergenerational effects of various social interventions, mostly aimed at improving access to education (Currie and Moretti (2003), Wantchekon et al. (2015), Mazumder et al. (2021), Chou et al. (2010)), health care (East et al. (2017)) and women's property rights (Deininger et al. (2013), Bose and Das (2021)) in both developed and low-income country settings. However, the intergenerational effects of marital transfers have received scant attention in the literature, and there is, to the best of our knowledge, only one paper that has studied the subject. Analyzing marital transfers in Pakistan, Khan (2021) finds that children of women who receive more transfers at marriage have a higher rate of school enrollment. However, Khan (2021) lacks exogenous variation in the amount of marital transfers, which makes it difficult to interpret her result as causal. We contribute to this literature by providing what is, to the best of our knowledge, the first causal evidence that policies affecting marital transfers have intergenerational consequences. This also adds to the existing literature that has studied

²A more detailed discussion of the literature on the link between domestic violence and outcomes of children is presented in Section 5.2.

the effects of actual and anticipated marital transfers on intra-household decisions that often have implications for the outcomes of the actual and intended recipients of the marital transfers (Brown (2009), Chan (2014), Calvi and Keskar (2021b), Anukriti et al. (2022a), Bhalotra et al. (2020), Ashraf et al. (2020)). Understanding the intergenerational effects of marital transfers is important because ignoring such effects may lead to an over or under-estimation of the social benefits (or costs) of policies that alter the equilibrium level of marital transfers. For instance, our findings indicate that reduced marital transfers adversely affect children’s nutrition in early childhood and their educational outcomes. Since health in early childhood and completed education affect future earnings capacity (Deolalikar (1988), Case and Paxson (2008), Hoddinott et al. (2008), Chetty et al. (2011)), policies that alter marital transfers could have long-term and far-reaching consequences beyond what policymakers had intended.

Second, strong son-preferring behaviors have been documented in India, the context of our study. The population sex ratio is male-biased (Sen (1992)) and Indian parents seem to prefer investing in sons rather than their daughters (Bharadwaj and Lakdawala (2013), Jayachandran and Kuziemko (2011), Oster (2009)). An extensive literature posits that such behaviors arise due to social norms (like patrilineality) followed by the Hindu majority (Jayachandran and Pande (2017), Das Gupta (2010)). Another motivation for son preferring behaviors could be high dowries, which increase the pecuniary cost of having a daughter relative to a son. A recent literature provides causal evidence that anticipated changes in dowry alter son-preferring behaviors as manifested in male-relative-to-female mortality in infancy (Bhalotra et al. (2020)) and the probability of giving birth to an additional child in the event of a daughter being born (Alfano (2017)). We add to this growing literature by demonstrating there is a greater deterioration in sons’ health and educational outcomes as compared to that of daughters. This is consistent with parents responding to lower relative pecuniary returns to a son (vis-a-vis a daughter) by reducing human capital investments in their sons.

The remainder of this paper is structured as follows: Section 2 discusses the background and provides details on the history of anti-dowry legislation in India. Section 3 briefly describes the data used for the analysis. Section 4 describes the empirical strategy. Section 5 details the results. Section 6 concludes with a brief discussion.

2 Background

Transfers at marriage have been observed in different societies across geographies and over time (see Anderson (2007)). Marital transfers have been studied by a rich economic literature going back at least to Becker (1991), who conceptualized dowries as prices that clear the marriage market. By contrast, Botticini and Siow (2003) argue that dowries may actually serve as pre-mortem bequests in societies where women do not enjoy formal property rights. The practice of dowry seems to have originated amongst upper caste Hindus (see Botticini and Siow

(2003)), but the practice has spread to the lower castes and the Muslims (Srinivasan (2005), Waheed (2009)). Further, dowry amounts have risen over time in India. Rao (1993a) estimates that dowry amounts range between 5-8 times the annual household income, and up to 67% of the value of household assets. This means that the birth of a daughter acts as a huge financial burden on the natal family. Hence, high dowry amounts have been suspected to motivate son-preferring behaviors (Arnold et al. (1998), Miller (1981), Das Gupta et al. (2003)), and a careful study by Bhalotra et al. (2020) finds that the mortality rate of Indian girls (relative to their male counterparts) increases when parents anticipate paying higher dowries. Further, extraction of dowries has been a motive behind criminal acts perpetrated against women, and “dowry deaths” have been documented both in the scholarly literature (Bloch and Rao (2002), Sekhri and Storeygard (2014)) and in the popular press (see Gyan (2013) and Singh (2019), for instance).

The Indian state has long taken cognizance of the financial strain imposed by dowries on daughters’ families. As early as 1961, the Indian Parliament enacted the Dowry Prohibition Act (1961) (Government of India (1961)). This piece of legislation applied to Hindus but did not apply to the marital transfers of Muslims. It forbade both giving and receiving dowries. The act of receiving dowry was made punishable with a prison sentence up to six months or a fine up to 5,000 Indian Rupees. However, the definition of dowry under this law was rather narrow. In particular, gifts that were not meant “as consideration for the betrothal or marriage”³ were not considered as dowry.

The Dowry Prohibition Act (1961) did not manage to curb the practice of dowry. Dowries remained widely prevalent, featuring in about 93% of the marriages solemnized in India between 1960 and 1995 (Anderson (2007)). Moreover, dowry amounts continued to rise in the ensuing decades (Rao (1993a), Rao (1993b), Chiplunkar and Weaver (2021)). The failure of the Dowry Prohibition Act (1961) to curb dowries drew a lot of criticism. It was pointed out that the provisions of the act were not strong enough, and that it left the definition of dowry ambiguous under the law (Rao (1973)). The exclusion of gifts exchanged voluntarily made cases notoriously difficult to prosecute. A plaintiff’s contention that a certain item was dowry could always be countered by the defendant saying that it was a gift made voluntarily and was not meant “as consideration for the betrothal or marriage” (Chatterjee (2020), pg. 65). There were, in fact, very few prosecutions under the Dowry Prohibition Act (1961) (Alfano (2017), Pramila (2015)).

In an attempt to check rising dowries and address concerns about the extant statutes, the Indian state adopted fresh legislation in 1985. These legislative measures, which are the focus of the current paper, entailed a few significant changes in the legal and administrative framework for controlling dowries. The original Dowry Prohibition Act (1961) was amended by passing the Dowry Prohibition (Amendment) Act, 1984 (Government of India (1984)) and

³Section 2 of (Government of India (1961))

the Dowry Prohibition (Maintenance of Lists of Presents to the Bride and Bridegroom) Rules, 1985 ([Government of India \(1985\)](#)). Both of these (i.e., the amendment and the new rules) came into force on October 2, 1985. This new legal regime entailed a strengthening of the existing anti-dowry provisions of the law in a few important ways. First, it raised the fine and prison sentence for receiving dowry. The maximum fine for the offence was raised from 5,000 Indian Rupees to the value of the dowry. Further, the amended law prescribed a minimum fine of 10,000 Indian Rupees for the offence of receiving a dowry. The prison sentence for the offence was increased from a maximum of 6 months to a minimum of 5 years. Second, the newly introduced Dowry Prohibition Rules stipulated that parties to the marriage maintain detailed lists of presents and gifts made during marriage. Under the amended statute, only those gifts that had been entered in such a list would be considered as gifts of a customary nature and not dowry. Third, the amendment made offences under the act cognizable for the purpose of investigation. This meant that the police could investigate a dowry-related case if they came to know of one even if a formal complaint had not been launched by the “victim”. Fourth, the definition of dowry was broadened to include “gifts and valuable securities” exchanged “at the time of marriage”, and not just items exchanged “as consideration” for marriage. Finally, we should note that just like the original Dowry Prohibition Act (1961), the amendment and the rule that took effect in 1985 applied to the Hindus but not to Muslims.

The new legal regime made it more difficult for potential recipients of dowry to evade consequences under the law. Not only was the punishment for the offence much harsher but it was also more difficult to pass off an item received as dowry as a customary gift. A defendant could no longer claim that a certain item exchanged at the time of marriage was not dowry on the ground that it was not exchanged “as consideration” for the marriage. There was also increased vigor in the prosecution of dowry-related cases. States were empowered to appoint as many Dowry Prohibition officers as they thought fit. As [Alfano \(2017\)](#) points out, there was a remarkable increase in the number of dowry-related cases that were heard by the Indian Supreme Court. Further, [Alfano \(2017\)](#) and [Calvi and Keskar \(2021b\)](#) independently conduct careful econometric analyses and find that dowries declined substantially (by about 45% of annual household income) following the strengthening of the anti-dowry provisions of the law in 1985.

While the new anti-dowry provisions of the law implemented in 1985 were applicable to the whole of India (except the state of Jammu and Kashmir), it bears emphasis that a few Indian states had already enacted amendments to the Dowry Prohibition Act (1961) prior to the nationwide implementation of the new legal regime in 1985. Starting with Bihar in 1975, Himachal Pradesh, Haryana, and Punjab enacted amendments to the original Dowry Prohibition Act (1961) in 1976. These amendments were similar to the amendments enacted nationwide in 1985. We refer to the states that amended the law in 1975-76 as “amended” states and to the rest of India (other than Jammu and Kashmir) as “unamended” states. Since the amended states had already enacted legislation similar to ones introduced nationwide later,

the strengthening of anti-dowry laws in 1985 would have entailed only a minor change in the anti-dowry provisions of the law in these states. So, the amended states would have been mildly “treated” in 1985. By contrast, the unamended states did not previously have strong anti-dowry laws like the ones introduced in 1985. The strengthening of anti-dowry laws in 1985 would have entailed a significant change in anti-dowry provisions of the law in these states. Hence, it would be reasonable to assume that these “unamended” states are more “intensely treated” in 1985. Based on this reasoning, we carry out our main analysis on unamended states. Further, we follow [Alfano \(2017\)](#) and treat the amended states as a “placebo” group. As we discuss in detail in Section 5, the amended states enable us to explore whether our main results are affected by confounding factors.

3 Data

This study employs data from two main sources: rounds 1 and 2 of the National Family Health Survey ([IIPS \(1994\)](#) and [IIPS \(1999\)](#)) and waves 1 and 2 of the India Human Development Survey ([Desai et al. \(2018a\)](#) and [Desai et al. \(2018b\)](#)). In what follows, we describe these two data sources in greater detail.

The National Family Health Surveys (NFHS hereafter) are repeated cross-sectional surveys conducted in India, and are part of the Demographic and Health Surveys (DHS). The NFHS surveys, like the other DHS surveys, collect rich demographic and health information for a nationally representative sample of the Indian population. They collect detailed information on marital and fertility histories of ever-married women of reproductive age (15-49 years), their health behaviors, and provide height and weight measurements of children under 5 years of age who were born to the interviewed woman.

We use the height and weight measurements of children available in our dataset to compute height-for-age, weight-for-age and weight-for-height z -scores. These z -scores are recommended by the World Health Organization to monitor child growth standards ([WHO \(2006\)](#)).⁴ The z -score indicates the number of standard deviations a child’s height (weight) is above or below the height (weight) of comparable healthy children in the reference population. For instance, a height-for-age z -score of -1 means that the child’s height is 1 standard deviation below the median height of healthy children of the same age and gender in the reference population. Children with a height-for-age z -score below -2 are categorized as “stunted” — a marker of severe long-term nutritional deprivation. Since our “treatment” (i.e., the strengthening of anti-dowry laws in 1985) plausibly affects outcomes of interest via channels (like

⁴For illustration, consider the construction of height-for-age z -scores. Height-for-age z -score = $\frac{\text{Height of child} - \text{Median}}{\text{SD}}$, where the median and SD are the median height and standard deviation of height among children of the same age (measured in months) and gender in the reference population, which consists of a sample of healthy children drawn from USA, Norway, Oman, India, Ghana and Brazil.

domestic violence and household wealth) that begin to operate even before the child is born, it is most likely to affect long-term measures of nutrition. So, we focus on markers of long-term nutritional status such as height-for-age and stunting.

A child's exposure to "treatment" in the current context varies by religion and year of mother's marriage, with Hindu children whose mothers married after 1985 being considered "treated". As in any causal analysis, we need to have an adequate sample of children from both the "pre" and "post" treatment periods. We utilize retrospective birth histories from NFHS-1 and NHFS-2 (conducted in 1992-93 and 1998-99 respectively), both of which provide height and weight measurements of children aged 5 years or less as of the date of the survey. With this data, the earliest marriage cohort (of mothers) in our sample is from 1978 while the youngest is 1997. Thus, we have 8 years of data in the "pre" period and 12 years of data in the "post" period.

The main analysis of health outcomes focuses on the fourth and lower birth order children. Descriptive statistics are presented in Panel A of Table 1.⁵ A mother on average was born in 1971 and married in 1988 at about 17 years of age. Mothers have an average of roughly 4 years of schooling. The average child was born in 1993 and was about 2 years old at the time of survey. The average height-for-age z -score in our sample is 1.93 standard deviations below the reference population median and about 50% of the children are stunted. Weight-for-age and weight-for-height z -scores are 1.75 and 0.91 standard deviations below the reference population median and about 20% of children are wasted.⁶

We use data from the India Human Development Survey (IHDS hereafter) to study the effect of the strengthening of anti-dowry laws in 1985 on the educational outcomes of school age children. The IHDS is a multitopic nationally representative panel dataset comprising 41,554 households across 1503 villages and 971 urban neighborhoods from 33 states and union territories of India. The data were collected in two waves: IHDS-1 from 2004 to 2005 and IHDS-2 from 2011 to 2012. Both IHDS-1 and IHDS-2 contain detailed information on socioeconomic and demographic characteristics. They also elicit detailed information from an eligible woman (between 15 and 49 years of age) residing in the household on a range of topics including the year of her marriage, her fertility history and the current educational attainment of her children.

Since the legal reform under study in the current paper was implemented in 1985, we restrict our sample to the children of women who got married between 1975 and 1995. The analysis presented in this paper uses data from both waves of the IHDS: We include children of all women (who meet the aforementioned criterion) interviewed in IHDS-1. To this dataset, we

⁵In accordance with the WHO guidelines, we exclude the outliers for the anthropometric measures, such as height-for-age z -score > 6 & height-for-age z -score < -6 ; weight-for-age z -score > 5 & weight-for-age z -score < -6 ; weight-for-height z -score > 5 & weight-for-height z -score < -5

⁶According to the WHO growth standard, a child is considered wasted if the weight-for-height z -score is two standard deviations below the reference population median.

append information on children of women in households sampled for the first time in IHDS-2. Thus, we use information from all households that were ever interviewed in the IHDS and meet our criterion for inclusion in the analysis. Further details regarding data construction are presented in Appendix 9.

Our main analysis focuses on the educational attainments of schoolgoing children (ages 5 to 16 years). Descriptive statistics for both mothers and children are presented in Panel B of Table 1. The average child was born in 1994, and would be about 11 years of age as of 2005 when survey work for IHDS-1 was conducted. The average completed years of education for children was about 4 years. The average mother was born in 1970, and married in 1987 at about 17 years of age. About 34% of the sample is urban, and about 28% were below the poverty line.

4 Empirical Strategy

The objective of our empirical strategy is to identify the causal effect of the strengthening of anti-dowry laws in 1985 on children's outcomes such as nutrition in early childhood and education. Our empirical strategy exploits the fact that the strengthened anti-dowry laws did not apply to Muslims. Hence, children of Hindu women who married after 1985 comprise the treated group after treatment. Hindu children whose mothers married before 1985 comprise the treated group prior to treatment. Muslims make up the pure control group

We estimate the following regression equation for child ' i ' living in state ' j ' who was born in year ' b ' to a mother who was born in year ' m ' and got married in year ' t ':

$$Y_{ijbmt} = \alpha + \beta Hindu_i + \gamma Post_{it} \times Hindu_i + X'_{ijbmt} \Gamma + \theta_j + \mu_b + \phi_m + \lambda_t + \kappa_j \times \psi_b + \omega_j \times \tau_m + \rho_j \times \pi_t + \epsilon_{ijbmt} \quad (1)$$

Here, $Hindu_i$ denotes an indicator for individual i belonging to the Hindu religion and $Post_{it}$ denotes an indicator for individual i 's mother having married in or after the year 1985, the year in which the stronger anti-dowry laws came into force. θ_j denotes a vector of state fixed effects, μ_b denotes a vector of child's birth year fixed effects, ϕ_m denotes a vector of mother's year of birth fixed effects, and λ_t denotes the vector of mother's year of marriage fixed effects. Besides, some of our specifications include further controls for interactions of state fixed effects with child's birth year fixed effects ($\kappa_j \times \psi_b$), interactions of state fixed effects with mother's year of birth fixed effects ($\omega_j \times \tau_m$) and interactions of state fixed effects with mother's year of marriage fixed effects ($\rho_j \times \pi_t$). Since we have included mother's year-of-marriage fixed effects into our specification, these fixed effects absorb the standalone $Post$ dummy. Our coefficient of interest is γ , which is the coefficient on the interaction of $Post_{it}$ with $Hindu_i$.

Our identification strategy relies on the fact that the stronger anti-dowry laws that came into effect in 1985 did not apply to Muslims. Hence, Muslims comprise the control group

in this study. Equation 1 implements a difference-in-differences strategy. Hindus comprise the treated group whereas Muslims comprise the control. The coefficient of interest, i.e., γ , captures the difference in pre-post gap in the outcome variable for the Hindu children (treated group) relative to the corresponding pre-post gap amongst their Muslim counterparts (control group). Given that equation 1 controls for state fixed effects, birth-year fixed effects and state-specific time trends, the coefficient of interest γ is identified based on within-state variation in the outcome variable that is not correlated with time. This identification strategy is valid if, in the absence of treatment, the time trends for Hindus are similar to those for Muslims. As we describe below, we conduct event studies to check the validity of our identifying assumption. We use the following specification for our event studies:

$$Y_{ijbmt} = \alpha + \beta Hindu_i + \sum_{t \in \{t_0, \dots, T\}} \gamma_t \mathbf{1}_{it} \times Hindu_i + X'_{ijbmt} \mathbf{\Gamma} + \theta_j + \mu_b + \phi_m + \lambda_t + \kappa_j \times \psi_b + \omega_j \times \tau_m + \rho_j \times \pi_t + \epsilon_{ijbmt} \quad (2)$$

Here, t_0 refers to the first period in the analysis, T denotes the last period in the analysis and $\mathbf{1}_{it}$ is an indicator variable that equals 1 if child i 's mother married in year t and takes the value 0 otherwise. For specifications that use the NFHS data, $t_0 = 1978 - 79$ while for the IHDS data, $t_0 = 1974 - 75$. In each case, $t = 1984 - 85$ is the omitted category.

Finally, we use a triple differences specification to examine heterogeneity of our results by groups such as gender and caste. For the purpose of illustration, we present below the specification we use to examine heterogeneity by gender:

$$Y_{ijbmt} = \alpha + \beta_1 Hindu_i + \beta_2 Boy_i + \delta Boy_i \times Post_{it} \times Hindu_i + \gamma_1 Post_{it} \times Hindu_i + \gamma_2 Post_{it} \times Boy_i + \gamma_3 Boy_i \times Hindu_i + X'_{ijbmt} \mathbf{\Gamma} + \theta_j + \mu_b + \phi_m + \lambda_t + \kappa_j \times \psi_b + \omega_j \times \tau_m + \rho_j \times \pi_t + \epsilon_{ijbmt} \quad (3)$$

Here, Boy_i is an indicator for the i -th child being a boy. The coefficient of interest is δ , which is the coefficient on the triple interaction term. Since we have included mother's year-of-marriage fixed effects (λ_t) into our specification, these fixed effects absorb the standalone $Post$ dummy. Notice that we have included all double interaction terms in the specification. The coefficient on the triple interaction term, i.e., δ , measures the additional change in the outcome Y for boys as compared to the corresponding change for girls (which is measured by γ_1 , the coefficient on the interaction of $Post$ and $Hindu$).

5 Results

5.1 Main Results

We use data from the NFHS to estimate the effects of the legal reforms of 1985 on indicators of nutrition in early childhood. Table 2 presents the results. The sample comprises fourth or lower

birth order children born to mothers who married between 1978 and 1997 in “unamended” states.⁷ The unamended states had not enacted strong anti-dowry laws prior to 1985. So these states were likely to be intensely “treated” when the anti-dowry laws were strengthened in 1985. Column 1 estimates a basic version of equation 1 that controls for state fixed effects, child’s year of birth fixed effects, birth order fixed effects, mother’s year of marriage fixed effects and mother’s year of birth fixed effects. Our coefficient of interest — the coefficient on the interaction term — is -0.24, and is statistically significant at 1%. This coefficient may be interpreted as follows: Mother’s exposure to the legal reforms of 1985 is associated with exposed children being shorter by an additional 0.24 standard deviations in terms of height-for-age as compared to the children in the “control” group. To put the magnitude of the coefficient into context, we should note that it is roughly of the same size as the India-Africa height gap for children at third or higher birth orders (Jayachandran and Pande (2017)).⁸

Since the specification controls for the fixed effects mentioned before, the coefficient of interest (in column 1, Table 2) is identified based on variation in mother’s exposure to treatment within a state, birth cohort of the child, birth order of the child, birth cohorts of the mother and year of marriage of the mother. While these fixed effects absorb unobservables that may vary by state, year of birth of mother and child and year of mother’s marriage, one may still be concerned that there may be omitted variables which are not adequately proxied by these fixed effects but covary with the treatment indicator. For instance, it is possible that different states were trending differently over time. If this time trend was correlated with the Hindu-Muslim gap in outcomes, it is possible that the estimate in column 1 is biased. To address this concern, we add three interactions: state fixed effects and child’s year of birth fixed effects, state fixed effects and mother’s year of birth fixed effects, state fixed effects and mother’s year of marriage fixed effects. These interactions non-parametrically control for differential time trends in each state. As column 2 shows, the coefficient remains stable and statistically significant (at 1%) even after the introduction of the interactions described above. However, there may still be omitted variables that co-vary with our treatment indicator. For instance, the women who married after 1985 may be systematically different from the women who married before 1985. In an attempt to address such concerns, column 3 adds a set of rich controls for demographic and household characteristics such as urban residence, source of drinking water, type of toilet, mother’s education and father’s occupation. The coefficient of interest remains stable and statistically significant at the 1% level.

We test for the robustness of the reported effects on children’s height-for-age to an alternative measurement of children’s long-term health. In columns 4, 5 and 6 of Table 2, the outcome

⁷Jayachandran and Pande (2017) report strong birth order effects in India, with higher birth order children being at a disadvantage. We exclude higher birth order children so as to avoid confounding due to birth order effects.

⁸See the coefficient on the interaction of India and third on column 3 of Table 2 in Jayachandran and Pande (2017)

variable is an indicator for stunting, which is considered a marker of severe malnutrition. The World Health Organization defines a child as stunted if her/his height-for-age is lower than -2 standard deviations. Column 4 presents results from estimating a basic specification similar to that in column 1. Mother's exposure to treatment is associated with a 4.7 percentage point increase in the probability of the child being stunted. The coefficient is statistically significant at the 1% level. In terms of magnitude, this amounts to an increase equivalent to about 9% of the prevalence of stunting in the data. Columns 5 and 6 add progressively richer controls (in a manner similar to columns 2 and 3). The coefficient of interest remains stable and statistically significant (at the 1% level) across these different specifications.

Table 3 presents our estimates of the effects of the legal changes of 1985 on educational attainment of children between 5 and 16 years of age in unamended states.⁹ We measure education as completed years of schooling. The data source for this analysis is the IHDS. Column 1 presents a basic version of equation 1 that controls for state fixed effects, child's year of birth fixed effects, mother's year of marriage fixed effects and mother's year of birth fixed effects. Our coefficient of interest — the coefficient on the interaction term — is -0.41, and is statistically significant at 1%. This coefficient may be interpreted as follows: Mother's exposure to the legal reforms of 1985 is associated with a 0.41 fewer years of schooling for children who were exposed as compared to their counterparts in the "control" group. In terms of magnitude, the estimated coefficient is roughly 10% of the average completed years of schooling in the data. Column 2 controls for interactions of state fixed effects with mother's year of marriage fixed effects, mother's year of birth fixed effects and child's year of birth fixed effects. Columns 3 and 4 add progressively richer sets of controls for household and individual characteristics. Column 3 adds controls for urban residence, caste category, BPL (Below Poverty Line) status, possession of owned or cultivated land, assets index, mother's education, highest male education in the household and economic status of the natal family as compared to the husband's family. Column 4 adds further controls for birth order of the child, gender of the first child born to the same mother, the time interval between mother's marriage and first birth, and the age of the mother at first birth. The coefficient of interest remains stable in magnitude and statistically significant at the 1% level across these specifications.

It is possible that there are differences in various observable characteristics between the treated and the control groups. In our regressions presented in Tables 2 and 3, we address this concern by controlling for a rich set of individual and household characteristics. To further address this concern, we carry out a battery of balance tests. These balance tests formally test the hypothesis that the "treatment" and the "control" did not differ in terms of observable individual characteristics such as woman's education, spousal education gap, year of marriage,

⁹Following Afridi (2010), we keep children 5-16 years of age in our sample. Older children are more likely to have moved out of the household for various reasons such as marriage (mean age at marriage in our sample is 17 years) or out-migration for work. Thus, excluding children above 16 years in the household might alleviate potential sample selection concerns.

relative economic status of the natal family and household characteristics of the marital family such as ownership of land and location in an urban or rural area. We implement the balance tests by running regressions specified in equation 1 where the outcome of interest is one of the aforementioned pre-determined household or individual characteristics. Table A1 presents the results. Our coefficient on the interaction term (i.e. $Post \times Hindu$) is statistically insignificant for all variables except for the primary education of the woman in the NFHS sample (column 3). This points to the fact that the sample is balanced on most observable characteristics. Further, despite “treated” mothers being more educated, the health and educational outcomes of their children were worse. Hence, it is unlikely that our results are driven by differences in mother’s education. These balance tests increase our confidence in the estimates presented in Tables 2 and 3.

To better understand how the effect of the legal reforms of 1985 was distributed across different groups, we perform several heterogeneity analyses. First, we use the triple differences specification presented in equation 3 to disaggregate our main results by gender of the child. Table 4 presents the results. Our coefficient of interest is the coefficient on the triple interaction term. Across different specifications in columns 1-4, the coefficient on the interaction term is negative, indicating that boys’ educational attainment declined more in response to the reform as compared to girls’ educational attainments. The coefficient on the triple interaction is statistically significant across specifications (columns 1-4), and is roughly the same size as the coefficient on the double interaction (i.e., $Post \times Hindu$). This points to economically meaningful gender-disaggregated effects. A similar pattern holds for height-for-age, but the effects here are somewhat muted. As columns 5-7 show, the coefficients on the triple interaction term are negative but statistically insignificant. Overall, the evidence presented here echo the findings reported in Alfano (2017). They are consistent with parents responding to reduced pecuniary returns to raising a son (relative to a daughter) by reducing the investment in sons relative to daughters.

Second, we carry out a heterogeneity analysis by caste. Previous research has documented that the higher castes customarily pay a higher amount of dowry (Rao (1993a), Srinivasan and Lee (2004), Srinivasan (2005), Srinivasan and Bedi (2007), Anukriti et al. (2022a)). Since the higher castes pay higher dowries, the newly-imposed legal restrictions on dowries would turn out to be a more binding restriction for higher caste groups as compared to lower caste groups. Thus, we would expect to find a stronger effect on higher caste groups as compared to their lower caste counterparts. Table 5 presents the estimates of the effects on education disaggregated by caste.¹⁰ As expected, the coefficient on the triple interaction term is negative across specifications. It is statistically significant in all specifications except in column 4. Ideally, we would have liked to conduct the same robustness check for our results on health

¹⁰All social who do not enjoy constitutionally mandated affirmative action are categorized as “high caste”. Thus, all social groups excluding Scheduled Castes, Scheduled Tribes and Other Backward Classes are categorized as “high” caste.

variables. Unfortunately, the NHFS-1 data does not contain information on caste at the level of aggregation suitable for the analysis. This remains a limitation of the current paper.

Third, we examine the heterogeneity of our estimated effects by whether kinship institutions in the state are mostly patrilineal or matrilineal.¹¹ Kinship institutions in patrilineal states tend to favor boys, and parents in these states typically have a higher degree of son preference. In the patrilineal states, where dowry transfers are relatively higher, one would expect stronger impacts of dowry reforms (Alfano (2017)). Results from the triple difference specification (equation 3) are presented in Table A2. As before, our coefficient of interest is the coefficient on the triple interaction term. As columns 1 and 2 show, for completed years of schooling, the coefficient of interest is negative and statistically different from zero. This indicates that the children's years of schooling declined more in patrilineal states as compared to the corresponding decline in matrilineal states. The results on health outcomes are qualitatively similar but lack statistical significance. Finally, we carry out the heterogeneity analysis by whether the household is located in a rural or an urban area. Wedding expenditures are typically higher in urban areas as compared to rural areas (Anukriti et al. (2022a)). Moreover, the urban areas have a greater police presence, and implementation of the law would be plausibly greater in urban areas. For both these reasons, it appears plausible that the legal reforms would have a greater impact in urban areas as compared to rural areas. Table A3 presents the results disaggregated by the type of residence. As expected, the coefficient of interest for the educational outcome is negative and statistically significant, indicating that years of schooling declined more in urban settings than in rural settings. However, we do not find evidence of similar heterogeneity for health outcomes.

5.2 Mechanisms

We think there may be two channels through which the new legal regime that reduced dowry amounts could affect children's health and educational outcomes. First, the new legal regime could affect mother's bargaining power. Second, lower dowries may lead to reduced household wealth. We discuss each of these below.

The existing literature documents that mothers who bring in lower dowries have lower bargaining power (Brown (2009), Calvi and Keskar (2021a), Zhang and Chan (1999), Makino (2019), Salem (2018)). Calvi and Keskar (2021b) conduct a careful econometric analysis and find that Hindu women who married after the legal reform were more likely to experience domestic violence in their marital homes. A large literature at the intersection of developmental psychology, public health and education documents correlations between children's exposure to domestic violence (between parents) and adverse outcomes in both developed and low-income

¹¹Following Jayachandran and Pande (2017), we define the states of Kerala, Arunachal Pradesh, Sikkim, Assam, Nagaland, Meghalaya, Manipur, Tripura, and Mizoram as matrilineal. The rest of India is considered patrilineal.

country settings (see [Fry et al. \(2018\)](#), [Fry et al. \(2012\)](#) and [Artz et al. \(2014\)](#) for surveys). Some of the adverse outcomes that childhood exposure to domestic violence correlates with include aggravated externalizing behaviors ([DeJonghe et al. \(2011\)](#)) and worse nutritional outcomes ([Ackerson and Subramanian \(2008\)](#)) in early childhood; lower age-appropriate educational attainments amongst schoolgoing children ([Jayasinghe et al. \(2009\)](#), [Fry et al. \(2016\)](#)); and adverse health outcomes in adult life ([Font and Maguire-Jack \(2016\)](#)). These findings are echoed in careful econometric analyses such as [Aizer \(2011\)](#), who finds that American mothers exposed to domestic violence during pregnancy give birth to children with lower birth weight. Further, [La Mattina \(2017\)](#) finds that children of Rwandan women who experience more domestic violence following the Rwandan genocide have worse educational attainments. To summarize, the evidence in the literature suggests increased domestic violence as a plausible channel driving the worsening of children’s nutritional and educational outcomes that we find.

An alternative channel through which reduced dowries induced by the legal reforms of 1985 might affect children’s health and education is through reduced household wealth. If this channel is in operation, we must observe that households that had women marrying into them after 1985 were, all else equal, poorer in terms of wealth and had a lower consumption expenditure per capita. Fortunately, the IHDS data is rich enough to allow us to test this hypothesis. Table [A4](#) reports the results. After controlling for a rich set of observables, households that had women who married after 1985 had a lower monthly consumption expenditure per capita, spent less on education and were poorer in terms of assets as measured by an assets index. The estimated effects are substantial and imply that the monthly per capita consumption expenditure of households of the "treated" group reduced by 5.5%, expenditure on education declined by about 27% and the wealth index decreased by 3%. These results are consistent with the wealth channel being in operation.

5.3 Identification

Our empirical strategy uses a difference-in-differences framework, and identification crucially hinges on the parallel trends assumption. The parallel trends assumption posits that the outcome variable for both treatment and control groups would have trended similarly over time in the absence of treatment. In empirical practice, researchers often use data in the pre-treatment period to test the validity of this assumption. In this paper, we conduct event studies as specified in equation [2](#). These event studies allow us to estimate the Hindu-Muslim gap by two-year bands (γ_t ’s in equation [2](#)). Figure [1](#) presents the results. As Panel A shows, conditional on observable characteristics, the Hindu-Muslim gap in height-for-age was statistically zero prior to the legal reforms of 1985. After 1985, the Hindu-Muslim gap opens up, increasing sharply in 1986-87, slightly rebounding in 1988-89, and steadily declining over the next 10 years. Panel B presents an event study analysis for completed years of education. Once again, we see that the Hindu-Muslim gap in completed years of schooling was statistically zero before

the legal reforms of 1985. After the passage of the amended act and the new rules, the Hindu-Muslim gap opens up and increases steadily over the next 6 years, and remains roughly steady in 1994-95. Since these results indicate that the Hindu-Muslim gap in outcomes opens up right from the year 1986, they help eliminate the concern that our results may be confounded by factors that may be operational shortly after the reform and may affect the Hindu-Muslim gap in outcomes independent of the legal reforms of 1985. As [Alfano \(2017\)](#) points out, there were, in fact, at least two such factors in the post-1985 periods that could act as potential confounders in the current context. First, the Indian government started adopting liberalizing policies. Second, prenatal sex determination techniques that facilitate sex-selective abortions started becoming available in the 1980s. Further, one might be concerned that our results may be confounded by amendments to the Hindu Succession Act of 1956 that were implemented by several states around the time that the stronger anti-dowry laws came into place.¹²

To further address these concerns, we conduct a few additional checks. Consider first the liberalization policy adopted by the Government of India. Starting in the late 1980s, India started dismantling the command and control structure of its economy, deregulating imports and exports and eventually cutting import tariffs dramatically. These measures affected firm level productivity, the rate of poverty and educational attainments of children ([Topalova \(2010\)](#), [Topalova and Khandelwal \(2011\)](#), [Edmonds et al. \(2010\)](#)). If these reforms affected Hindus and Muslims differentially, it is possible that the Hindu-Muslim gap that we estimate in post-1985 period is at least partially driven by their differential exposure to economic liberalization. In that case, we should observe a Hindu-Muslim gap emerging in the post-1985 period in each state, irrespective of how salient the changes in the anti-dowry laws of 1985 were for that state. Fortunately, we have variation in the salience of the anti-dowry laws by state. As mentioned before, some states had already strengthened their anti-dowry laws much before 1985. For these states, which we will refer to as “amended” states, a Hindu-Muslim gap in outcomes of interest after 1985 would indicate these gaps being driven by factors other than the anti-dowry laws of 1985. To check whether this is the case, we estimate equation 1 on the sample of amended states. Table A5 presents the results. We notice that in each case, the coefficient of interest (i.e. the coefficient on the interaction term) is statistically insignificant. We further validated these results using the event studies, as shown in Figure B1. As Panel A shows the Hindu-Muslim gap for Height-for-age z -score did not change significantly following the implementation of the stronger anti-dowry laws. A similar pattern holds for the completed years of education (see Panel B). These findings help eliminate the concern our estimated effects are driven by economic liberalization rather than the strengthening of the anti-dowry provisions of the law that took place in 1985.

Next, we address the concern that the advent of prenatal sex determination techniques

¹²The Hindu Succession Act of 1956 was the governing inheritance law applicable to Hindus, Sikhs, Jains, and Buddhists but not to others.

(like ultrasound scans) that facilitated sex-selective abortion might be a potential confounder. Sex selective abortions, known to be more common amongst Hindus than amongst Muslims, could, in principle, cause outcomes of Hindus and Muslims to diverge over time. If prenatal sex determination techniques were becoming increasingly available around 1985 (when the strengthening of anti-dowry laws occurred), the Hindu-Muslim gap observed after 1985 might be driven by differential sex-selective abortions between the two religious groups rather than the legal reforms we focus on in this paper. A few observations and checks help us eliminate this concern in the current context.

First, recent research (see [Anukriti et al. \(2022b\)](#)) suggests that sex-selective abortions helped reduce the birth of unwanted daughters. In fact, [Anukriti et al. \(2022b\)](#) states that sex-selective abortion eliminated unwanted fertility completely. Assuming only the Hindus practise sex-selective abortions, this would mean that Hindu children, particularly girls, grew up in smaller families. This would imply that there was more resource per-child in Hindu households, and should lead to an improvement in outcomes for Hindus relative to Muslims. However, we report exactly the opposite. We find that a Hindu-disadvantage emerges after the implementation of the strengthened anti-dowry provisions in 1985. This indicates that our main results (on indicators of children's health and education in [Table 2](#) and [3](#)) are plausibly not driven by increased sex-selective abortions amongst Hindus in the post-1985 period in our data.

However, one may still be concerned that our gender-differentiated heterogeneity results might be driven by sex-selective abortions. Recent papers by [Hu and Schlosser \(2015\)](#) and [Anukriti et al. \(2022b\)](#) suggest that the advent of the prenatal sex determination techniques led to a reduced female disadvantage in parental investment in early childhood (like breastfeeding, vaccination) and outcomes such as malnutrition. If sex-selective abortion actually took place in the post-1985 period, a greater worsening of outcomes for boys relative to girls may not reflect parental responses to altered pecuniary returns to girls (relative to boys) but the fact that more of the girls born to mothers who married after 1985 were wanted and would have received greater parental investments anyway. If our gender-differentiated heterogeneity results are an artefact of sex-selective abortion, they should be observed in amended states as well. To check whether this is the case, we estimate [equation 3](#) on the sample of amended states. [Table A6](#) presents the results. We notice that in each case, the coefficient of interest (i.e. the coefficient on the triple interaction term) is statistically insignificant. This finding indicates that our gender-differentiated heterogeneity results are not plausibly driven by sex-selective abortions.

As a further robustness check, we re-run our analysis on a sample that was likely not exposed to prenatal sex determination techniques. Ultrasound scanners that facilitated sex-selective abortions arrived in India in the 1980s but it was not until the mid-1990s that they were widely available (see [Bhalotra and Cochrane \(2010\)](#)). Hence, we re-run our specification in [equation 1](#) with the sample restricted to children born before 1993. These children were

likely not exposed to prenatal sex determination techniques, and their outcomes are unlikely to have been confounded by sex-selective abortions. Table A7 presents the results. We find that the coefficient of interest (i.e. the coefficient on the interaction term) remains stable (in comparison with Tables 2 and 3) in magnitude and statistically significant. This result provides further evidence that our main results (reported in Tables 2 & 3) are not driven by sex selective abortions.

Finally, we address the concern that amendments to the Hindu Succession Act of 1956 (HSA hereafter) that were adopted in several states could be a potential confounder. These amendments took place through the 1970s and 80s in several southern Indian states (like Kerala in 1976, Andhra Pradesh in 1986, Tamil Nadu in 1989, Karnataka and Maharashtra in 1994). Recent research (see Roy (2015)) suggests that these amendments led to higher dowry payments for daughters. In this connection, we should note that our main results (presented in Tables 2 and 3) control for state fixed effects. So, the coefficient of interest is identified based on within-state variation in exposure to treatment. However, as a further robustness check, we re-run the specification in equation 1 on a sample that excludes children born to mothers who married after HSA amendments in the five states that amended the HSA. Results are presented in Table A8. The coefficient of interest (i.e., the coefficient on the interaction term) is significant and similar in magnitude to our main estimates provided in Tables 2 & 3. These results help eliminate the concern that our main results in Tables 2 and 3 might be confounded by the effect of amendments to the Hindu Succession Act of 1956.

5.4 Additional Results and Robustness Checks

Our main results on children’s health outcomes (in Table 2) use height-for-age and stunting as outcome variables. Both of these are indicators of long-term nutritional status of the child. For the sake of completeness, we report the estimated effects of the legal reform of 1985 on indicators of short-term nutritional status such as weight-for-age, weight-for-height and wasting. Table A9 presents the results. The coefficient of interest is magnitudinally small and statistically insignificant for weight-for-age and wasting. However, for weight-for-height, the coefficient of interest is statistically significant. The results seem to indicate that children exposed to the reform do slightly better on weight-for-height as compared to their counterparts who were not exposed to the legal reform. To further investigate the validity of these results, we carry out event studies. Results are presented in Figure B2. As Panel (b) shows, there seems to be a pre-trend in the weight-for-height variable. Hence, we do not attribute causality to the weight-for-height result.

Our main results on education (in Table 3) consider completed years of schooling as the outcome of interest. For schoolgoing children, this outcome varies with age. Hence, it is important to compare the educational attainments of children of a given age amongst the treated to the outcomes of their same-age counterparts amongst the non-treated. While the

controls for year of birth fixed effects in Table 3 ensure that we are comparing the completed years of education of treated children to that of non-treated children within the same age group, we thought it necessary to check the sensitivity of our results to alternative measures of educational attainment. First, we compute standardized years of schooling by age of the child.¹³ The standardized years of education shows the number of standard deviations by which a child's years of schooling exceeds the mean in her/his age group. This outcome variable automatically ensures that we are comparing children's educational attainments within the same age group. Second, we re-define our outcome variable as an indicator for primary school completion.¹⁴ Table A10 reports the results. The coefficient of interest is stable and statistically significant across different specifications¹⁵. To further validate these results we carry out the event studies and the results are presented in Figure B3. For both standardized years of schooling and primary school completion, the Hindu-Muslim gap was statistically zero before the legal reforms of 1985. A Hindu-disadvantage emerges after the legal reforms of 1985.

Next, we address the concern that households could have anticipated the reforms and married their daughters before/after the law was actually implemented if they planned to pay higher/lower dowries. That could potentially make the timing of marriage endogenous. In that case, any estimate based on a comparison of marriages before 1985 and marriages after 1985 could be biased. To address these concerns, we follow the existing literature (see Alfano (2017), Calvi and Keskar (2021b)) and check the sensitivity of our main results (reported in Tables 2 & 3) to two alternative definitions of the treatment variable. In the first of these two checks, we drop children whose mothers married in the years 1984, 1985, 1986 and 1987 from the analysis, as in these years the marriage of women could be easily scheduled as per the preferences of the families (Calvi and Keskar (2021a)). We estimate equation 1 for this restricted sample and the results are presented in Table A11. As the coefficient of interest remains stable and statistically significant for both health and educational outcomes, excluding marriage years from 1984-1987 has no substantial impact on our estimates. Second, we re-define the "Post" variable in an alternate way. Since the average age at marriage in our sample is 17 years, we re-define post to equal 1 if a woman was 17 years or younger in 1985, and zero otherwise. This alternative definition of exposure to treatment is based on the year of birth,

¹³The standardized years of education of individual i of age a is defined as: $\text{Standardized education}_{ia} = \frac{Y_{ia} - \bar{Y}_a}{\sigma_a}$ where $\bar{Y}_a$ denote the mean years of schooling for all individuals of age a and σ_a denotes the standard deviation of completed years in that age group. Since it is more likely for children aged 5-16 years to have incomplete schooling, this variable is a good approximation of a child's performance relative to his/her cohorts (Afridi (2010), Bose and Das (2021)).

¹⁴A child aged 5-7 years is less likely to have completed primary school education, and in our data, the youngest child with a complete primary school education is 8 years old. Therefore, the sample for this was restricted to children between 8 and 16 years of age.

¹⁵We should note that the coefficient in Column 1 of Table A10 marginally misses statistical significance at the 10% level. The p-value is 0.11

not the year of marriage. Since women who married around 1985 were born much before the strengthening of the anti-dowry laws in 1985, this alternative exposure indicator could not have been influenced by behavioral responses to the legal reforms of 1985. Results are presented in Table A12. The stability of the coefficient of interest compared to the results reported in Tables (2 & 3) help mitigate the concern that our original measure of exposure to treatment might have been endogenous.

To keep the outliers away and avoid any confounding factors due to birth order effects, we restrict our main analysis to children with birth order less than or equal to 4, and this comprises almost 87% of our whole sample¹⁶. As a robustness check, we re-run equation 1 in the NFHS dataset without this birth order restriction. Results are presented in Table A13. The coefficient of interest (i.e. the coefficient on the interaction term) is stable and statistically significant. Therefore, this robustness check shows that our results are not an artefact of excluding higher order births.

Next, we address the concern that our results on health outcomes might be influenced by an exceptionally sharp Hindu disadvantage in 1986 and 1987 (see Panel A Figure 1). To address this concern, we re-run equation 1 and conduct an event study by dropping the marriage years 1986 and 1987. Results are presented in Table A14 and Figure B4 respectively. As Figure B4 shows a Hindu disadvantage emerges from 1988-89 onwards. This confirms our main results (Table 2) were not driven exclusively by the years 1986 and 1987.

Central to the differences-in-differences framework is the parallel trends assumption. This assumption posits that in the absence of the reforms of 1985, the outcomes of Hindus and Muslims would have evolved in parallel. In section 5.3 we validate this assumption by conducting event studies. To further verify the parallel trends assumption, we restrict our sample to the pre-treatment period and perform a falsification test with a fake treatment (Duflo (2001)). The NFHS sample is restricted to children whose mothers married between 1972 and 1984 and IHDS to children whose mothers married between 1970 and 1984. We run a similar regression specification as shown in equation 1, except the Post variable is replaced with False-Post, which is equal to 1 if the mother got married after 1979, and 0 otherwise. If there were pre-trend differences between the treatment and the control group, the coefficient of interest on the newly generated interaction term should be statistically different from zero. Table A15 demonstrates that this is not the case. In each case the coefficient of interest (i.e. the coefficient on the interaction term) is magnitudinally small and statistically insignificant. This result provides further confidence in the validity of the crucial parallel trends assumption.

The main results presented in this paper (see Tables 2–5) restrict the sample to unamended states. As explained before, the unamended states had not made changes to their anti-dowry

¹⁶This restriction applies to the NFHS dataset, not the IHDS dataset because the IHDS dataset does not contain a birth order variable for our primary sample (Table 3 (columns 1–3), Table A10 (columns 1–3 & 5–7)). For the IHDS dataset, we control for birth order fixed effects when extended controls are introduced (Table 3 column 4, Table A10 columns 4 & 8)

laws prior to 1985, and would therefore have been intensely treated when the anti-dowry legal reforms were enacted in 1985. However, as a further robustness check, we present estimated effects for all Indian states (both unamended and amended). Results are presented in Table [A16](#). Columns 1-3 show a decline in height-for-age, columns 4-6 show an increase in the probability of stunting, and columns 7-9 show a reduction in the completed years of education. In each case the coefficient of interest is statistically significant at the 1% level. These results are similar to those obtained for unamended states (in Tables [2](#) and [3](#)).

6 Conclusion

In this paper, we study the intergenerational consequences of marital transfers in India. Using a sharp exogenous reduction in dowry amounts induced by a set of legal reforms that strengthened anti-dowry provisions of the law, we find that lower dowry received by mothers at the time of marriage leads to a worsening of their children's nutritional outcomes in early childhood and to a deterioration in educational attainments when this cohort of children attain schoolgoing age. Our results are most plausibly driven by reduced household wealth and increased domestic violence against mothers who bring in lower dowry into their marital home. Our study adds to the body of literature that documents the consequences of marital transfers. Policies that affect marital transfers have different effects on different groups of individuals. For instance, the legal reforms under study in this paper would have reduced the financial burden on parents with daughters of marriageable age. On the other hand, they adversely affect the next generation, reducing nutritional and educational attainments of children whose mothers bring in lower dowries. Thus the legal reforms could compromise their income earning ability in later life. Ignoring these costs might lead to an overstatement of the benefits of such policies which alter marital transfer payments. In actual practice, policymakers should account for both these costs and benefits into their calculations as they formulate policies that affect marital transfers. Like any other policy, such policies should be adopted only if they yield a positive net benefit to society. Even if it turns out that policies that affect marital transfers are worth adopting, the policymaker should undertake remedial measures targeted at groups that are adversely affected by the policy.

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Table 1: Summary Statistics

Variable	Mean	Std. Dev.	Min	Max
Panel A: NFHS-1&2				
Height-for-age	-1.93	1.854	-5.998	5.982
Stunted	0.503	0.5	0	1
Weight-for-age	-1.754	1.464	-5.994	4.992
Weight-for-height	-0.913	1.402	-4.999	4.964
Wasted	0.199	0.399	0	1
Child's birth year	1993.265	3.385	1988	2000
Mother's marriage year	1988.901	5.092	1978	1997
Mother's age at marriage	17.784	3.244	8	41
Mother's birth year	1971.117	5.417	1949	1984
Urban	0.311	0.463	0	1
Mother's education	4.274	4.827	0	20
Observations = 30,799				
Panel B: IHDS-1&2				
Complete years of education	4.035	3.106	0	13
Primary Education	0.435	0.496	0	1
Standardized education	-0.003	1.007	-5.241	4.188
Child's birth year	1994.364	3.381	1989	2007
Mother's marriage year	1987.033	4.976	1975	1995
Mother's age at marriage	16.916	2.989	10	35
Mother's birth year	1970.098	5.064	1956	1985
Urban	0.341	0.474	0	1
Assets	11.486	6	0	32
Poor	0.281	0.449	0	1
Any land	0.432	0.495	0	1
Mother's education	3.38	4.326	0	16
Monthly per capita consumption expenditure	778.034	739.408	100	13618.27
Observations = 37,910				

Table 2: Anti-Dowry Laws of 1985 and Child's Outcome (Height-for-age and Stunting)
(Unamended States)

	Height-for-age			Stunted		
	(1)	(2)	(3)	(4)	(5)	(6)
Hindu	0.254*** (0.064)	0.296*** (0.069)	0.295*** (0.072)	-0.0544*** (0.016)	-0.0676*** (0.020)	-0.0659*** (0.021)
Post*Hindu	-0.242*** (0.073)	-0.306*** (0.077)	-0.321*** (0.081)	0.0468** (0.020)	0.0620*** (0.023)	0.0612*** (0.022)
State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth order FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	No	Yes	Yes	No	Yes	Yes
Mother's birth year FE × State FE	No	Yes	Yes	No	Yes	Yes
Child's birth year FE × State FE	No	Yes	Yes	No	Yes	Yes
Additional Controls	No	No	Yes	No	No	Yes
<i>N</i>	22992	22927	22729	22992	22927	22729
<i>R</i> ²	0.137	0.185	0.205	0.125	0.169	0.188

Notes: The sample comprises fourth or lower birth order children who were under 5 years of age at the time of the survey and whose mothers got married between 1978 and 1997. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. Height-for-age is the child's height-for-age *z*-score. Stunted is a dummy that equals 1 if child's height-for-age *z*-score < -2, and is 0 otherwise. Additional controls include dummy for urban residence, source of drinking water, type of toilet, mother's education and father's occupation. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Authors' calculations from NFHS-1&2

Table 3: Anti-Dowry Laws of 1985 and Child's Complete Years of Education
(Unamended States)

	Complete years of education			
	(1)	(2)	(3)	(4)
Hindu	0.826*** (0.157)	0.824*** (0.129)	1.007** (0.377)	0.917** (0.375)
Post*Hindu	-0.411*** (0.139)	-0.408*** (0.089)	-0.471*** (0.082)	-0.459*** (0.092)
State FE	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	No	Yes	Yes	Yes
Mother's birth year FE × State FE	No	Yes	Yes	Yes
Child's birth year FE × State FE	No	Yes	Yes	Yes
Additional Controls	No	No	Yes	Yes
Extended Controls	No	No	No	Yes
<i>N</i>	31454	31360	27987	21467
<i>R</i> ²	0.598	0.632	0.724	0.756

Notes: The sample comprises children who were 5-16 years of age at the time of the survey and whose mothers got married between 1975 and 1995. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. Complete years of education is the child's total years of schooling. Additional controls include dummy for urban residence, caste category, whether poor or not, possession of any owned or cultivated land, assets index, whether in IHDS wave 1 or 2, mother's education, highest male education in the household and economic status of the natal family as compared to the husband's family. Extended controls include birth order of the child, gender of the first child born to the same mother, the time interval between mother's marriage and first birth, and the age of the mother at first birth. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Authors' calculations from IHDS-1&2

Table 4: Heterogeneity by Gender (Boy vs Girl)
Anti-Dowry Laws of 1985 and Child's Outcomes (Complete years of education and
Height-for-age)
(Unamended States)

	Complete years of education				Height-for-age		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Hindu	0.622*** (0.204)	0.605*** (0.178)	0.821** (0.393)	0.681 (0.412)	0.235** (0.094)	0.268*** (0.067)	0.283*** (0.069)
Post*Hindu	-0.259* (0.144)	-0.232** (0.106)	-0.311*** (0.103)	-0.252* (0.142)	-0.195* (0.105)	-0.231*** (0.080)	-0.263*** (0.086)
Post*Hindu*Boy	-0.291* (0.160)	-0.335** (0.145)	-0.308** (0.149)	-0.394* (0.213)	-0.0919 (0.138)	-0.148 (0.142)	-0.114 (0.145)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	No	Yes	Yes	Yes	No	Yes	Yes
Mother's birth year FE × State FE	No	Yes	Yes	Yes	No	Yes	Yes
Child's birth year FE × State FE	No	Yes	Yes	Yes	No	Yes	Yes
Additional Controls	No	No	Yes	Yes	No	No	Yes
Extended Controls	No	No	No	Yes	No	No	No
<i>N</i>	31454	31360	27987	21467	22992	22927	22729
<i>R</i> ²	0.598	0.633	0.724	0.756	0.137	0.186	0.206

Notes: In columns 1-4, the sample comprises children who were 5-16 years of age at the time of the survey and whose mothers got married between 1975 and 1995. The sample in columns 5-7 comprises fourth or lower birth order children who were under 5 years of age at the time of the survey and whose mothers got married between 1978 and 1997. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. Boy is an indicator of the child being male. Complete years of education is the child's total years of schooling. Height-for-age is the child's height-for-age z-score. Additional controls in columns 1-4 include dummy for urban residence, caste category, whether poor or not, possession of any owned or cultivated land, assets index, whether in IHDS wave 1 or 2, mother's education, highest male education in the household and economic status of the natal family as compared to the husband's family. Extended controls in columns 1-4 include birth order of the child, gender of the first child born to the same mother, the time interval between mother's marriage and first birth, and the age of the mother at first birth. Additional controls in columns 5-7 include dummy for urban residence, source of drinking water, type of toilet, birth order of child, mother's education and father's occupation. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Columns 1-4 are authors' calculations from IHDS-1&2 and columns 5-7 are authors' calculations from NFHS-1&2

Table 5: Heterogeneity by Caste (High Caste vs Low Caste)
Anti-Dowry Laws of 1985 and Child's Complete Years of Education
(Unamended States)

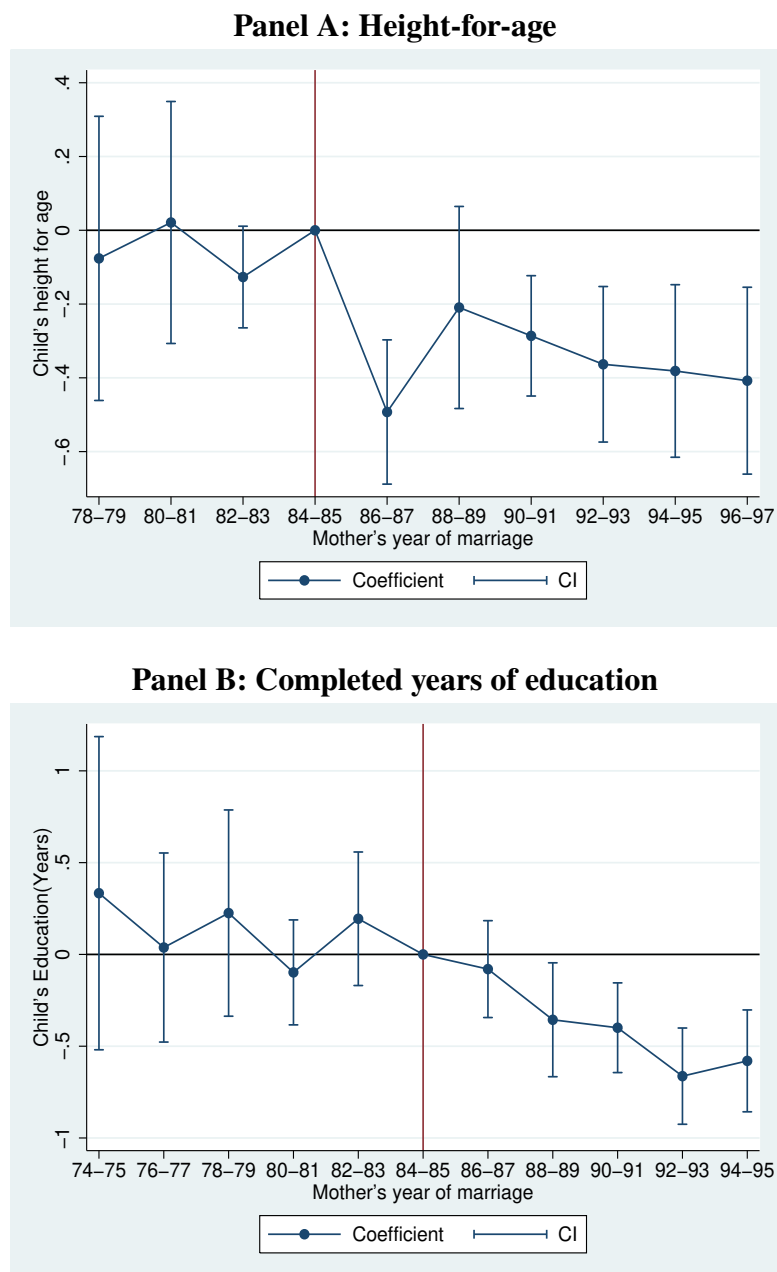
	Complete years of education			
	(1)	(2)	(3)	(4)
Hindu	0.692*** (0.169)	0.696*** (0.135)	0.941** (0.368)	0.855** (0.350)
Post*Hindu	-0.322** (0.156)	-0.301*** (0.101)	-0.364*** (0.094)	-0.374** (0.143)
Post*Hindu*HighCaste	-0.390* (0.208)	-0.387** (0.180)	-0.373** (0.140)	-0.288 (0.243)
State FE	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	No	Yes	Yes	Yes
Mother's birth year FE × State FE	No	Yes	Yes	Yes
Child's birth year FE × State FE	No	Yes	Yes	Yes
Additional Controls	No	No	Yes	Yes
Extended Controls	No	No	No	Yes
<i>N</i>	31,454	31,360	27,987	21,467
<i>R</i> ²	0.602	0.636	0.724	0.756

Notes: The sample comprises children who were 5-16 years of age at the time of the survey and whose mothers got married between 1975 and 1995. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. HighCaste is an indicator of child belonging to a Brahmin or forward caste family. Complete years of education is the child's total years of schooling. Additional controls include dummy for urban residence, whether poor or not, possession of any owned or cultivated land, assets index, whether in IHDS wave 1 or 2, mother's education, highest male education in the household and economic status of the natal family as compared to the husband's family. Extended controls include birth order of the child, gender of the first child born to the same mother, the time interval between mother's marriage and first birth, and the age of the mother at first birth. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Authors' calculations from IHDS-1&2

Figure 1: Event Study: Hindu-Muslim gap in
Child's Height-for-age and Complete Years of Education by Mother's Year of Marriage
(Unamended States)



Notes: Solid dots represent the coefficient estimates (γ_t 's) on the interaction between $Hindu_i$ and 1_{it} (an indicator of the mother having married in year t) from equation 2. The years 1984-85 is the base category. The red vertical line represents the reform period (1984-85) and the vertical bars are the 95% confidence intervals.

Source: Authors' calculations from NFHS-1&2 and IHDS-1&2

7 Appendix A: Tables

Table A1: Balance Test
Anti-Dowry Laws of 1985 and Household, Individual Characteristics
(Unamended States)

	NFHS-1&2				IHDS-1&2					
	Urban	Spousal education gap	Primary education	Marriage year	Urban	Land	Natal home	Primary education	Marriage year	Spousal education gap
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Hindu	-0.152*** (0.050)	0.611* (0.332)	0.0453* (0.023)	0.0793 (0.211)	-0.109* (0.057)	0.164*** (0.042)	-0.00274 (0.013)	0.0937*** (0.032)	-0.215 (0.160)	0.444** (0.206)
Post*Hindu	-0.00704 (0.037)	-0.131 (0.261)	0.0520*** (0.013)	-0.107 (0.514)	-0.0254 (0.022)	-0.00116 (0.016)	0.0173 (0.011)	0.0222 (0.020)	0.173 (0.195)	0.169 (0.168)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
Mother's marriage year FE × State FE	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
<i>N</i>	40338	40037	40236	40351	16493	16493	15659	16493	16556	16390
<i>R</i> ²	0.156	0.097	0.163	0.657	0.118	0.129	0.054	0.124	0.725	0.079

Notes: In columns 1-4, the sample comprises mothers who got married between 1978 and 1997. The sample in columns 5-10 comprises mothers who got married between 1975 and 1995. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. Primary education is a dummy that equals 1 if mother has completed her primary education, and 0 otherwise. Land indicates if the household has any agricultural land. Natal home is a dummy that equals 1 if the natal home of eligible women is better off than the husband's home, and 0 otherwise. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Columns 1-4 are authors' calculations from NFHS-1&2 and columns 5-10 are authors' calculations from IHDS-1&2

Table A2: Heterogeneity by Region (Patrilineal vs Matrilineal)
Anti-Dowry Laws of 1985 and Child's Outcomes (Complete Years of Education, Height-for-age
and Stunting)
(Unamended States)

	Complete years of education		Height-for-age		Stunted	
	(1)	(2)	(3)	(4)	(5)	(6)
Hindu	0.336 (0.708)	0.512 (0.676)	-0.025 (0.217)	0.151 (0.194)	0.0271 (0.056)	-0.0166 (0.052)
Post*Hindu	0.487* (0.284)	0.17 (0.319)	-0.247 (0.217)	-0.274 (0.208)	0.0588 (0.051)	0.0596 (0.051)
Post*Hindu*Patrilineal	-1.016*** (0.309)	-0.698** (0.340)	-0.0131 (0.252)	0.0192 (0.236)	-0.0115 (0.058)	-0.016 (0.058)
Mother's marriage year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Additional Controls	No	Yes	No	Yes	No	Yes
<i>N</i>	31454	28093	22992	22796	22992	22796
<i>R</i> ²	0.565	0.676	0.122	0.146	0.115	0.139

Notes: In columns 1-2, the sample comprises children who were 5-16 years of age at the time of the survey and whose mothers got married between 1975 and 1995. The sample in columns 3-6 comprises fourth or lower birth order children who were under 5 years of age at the time of the survey and whose mothers got married between 1978 and 1997. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. Patrilineal is an indicator of the child belonging to the patrilineal states (Kerala, Arunachal Pradesh, Sikkim, Assam, Nagaland, Meghalaya, Manipur, Tripura, and Mizoram). Complete years of education is the child's total years of schooling. Height-for-age is the child's height-for-age z-score. Stunted is a dummy that equals 1 if child's height-for-age z-score < -2, and is 0 otherwise. Additional controls in columns 1-2 include dummy for urban residence, caste category, whether poor or not, possession of any owned or cultivated land, assets index, whether in IHDS wave 1 or 2, mother's education, highest male education in the household and economic status of the natal family as compared to the husband's family. Additional controls in columns 3-6 include dummy for urban residence, source of drinking water, type of toilet, birth order of child, mother's education and father's occupation. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Columns 1-2 are authors' calculations from IHDS-1&2 and columns 3-6 are authors' calculations from NFHS-1&2

Table A3: Heterogeneity by Residence (Urban vs Rural)
Anti-Dowry Laws of 1985 and Child's Outcomes (Complete Years of Education, Height-for-age
and Stunting)
(Unamended States)

	Complete years of education		Height-for-age		Stunted	
	(1)	(2)	(3)	(4)	(5)	(6)
Hindu	0.737*** (0.119)	0.913** (0.377)	0.346*** (0.090)	0.354*** (0.103)	-0.0772** (0.033)	-0.0782** (0.036)
Post*Hindu	-0.194* (0.113)	-0.283*** (0.096)	-0.320** (0.149)	-0.333** (0.152)	0.065 (0.043)	0.0629 (0.042)
Post*Hindu*Urban	-0.535*** (0.145)	-0.529*** (0.140)	0.0644 (0.204)	0.059 (0.202)	-0.0134 (0.053)	-0.00984 (0.050)
State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Additional Controls	No	Yes	No	Yes	No	Yes
<i>N</i>	31360	27987	22927	22729	22927	22729
<i>R</i> ²	0.639	0.725	0.187	0.205	0.17	0.189

Notes: In columns 1-2, the sample comprises children who were 5-16 years of age at the time of the survey and whose mothers got married between 1975 and 1995. The sample in columns 3-6 comprises fourth or lower birth order children who were under 5 years of age at the time of the survey and whose mothers got married between 1978 and 1997. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. Urban is an indicator of child belonging to an urban area. Complete years of education is the child's total years of schooling. Height-for-age is the child's height-for-age z-score. Stunted is a dummy that equals 1 if child's height-for-age z-score < -2, and is 0 otherwise. Additional controls in columns 1-2 include caste category, whether poor or not, possession of any owned or cultivated land, assets index, whether in IHDS wave 1 or 2, mother's education, highest male education in the household and economic status of the natal family as compared to the husband's family. Additional controls in columns 3-6 include source of drinking water, type of toilet, birth order of child, mother's education and father's occupation. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Columns 1-2 are authors' calculations from IHDS-1&2 and columns 3-6 are authors' calculations from NFHS-1&2

Table A4: Mechanisms
Anti-Dowry Laws of 1985 and Household Characteristics
(Unamended States)

	Monthly per capita consumption expenditure		Expenditure on education		Total Assets	
	(1)	(2)	(3)	(4)	(5)	(6)
Hindu	128.8*** (22.310)	37.48 (65.770)	1413.8*** (231.500)	1994.9** (804.600)	-0.184 (0.319)	1.379** (0.662)
Post*Hindu	-42.48*** (15.750)	-41.27*** (14.750)	-825.4*** (153.300)	-884.1*** (161.100)	0.0685 (0.164)	-0.352*** (0.084)
State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Additional Controls	No	Yes	No	Yes	No	Yes
<i>N</i>	31395	29127	31425	29152	31432	29157
<i>R</i> ²	0.132	0.463	0.073	0.305	0.209	0.765

Notes: The sample comprises households where mothers got married between 1975 and 1995. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. Additional controls include dummy for urban residence, caste category, whether poor or not, possession of any owned or cultivated land, economic status of the natal family as compared to the husband's family, the logarithm of household income, if household has electricity connection, whether in IHDS wave 1 or 2, and type of toilet in the household. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Authors' calculations from IHDS-1&2

Table A5: Anti-Dowry Laws of 1985 and Child's Outcomes (Height-for-age, Stunting and Complete Years of Education)
(Amended States)

	Height-for-age		Stunted		Complete years of education	
	(1)	(2)	(3)	(4)	(5)	(6)
Hindu	0.0557 (0.088)	-0.0419 (0.085)	-0.0394 (0.025)	-0.0213 (0.024)	0.942** (0.412)	0.878*** (0.250)
Post*Hindu	0.00802 (0.103)	0.0133 (0.102)	-0.00512 (0.031)	-0.00177 (0.029)	-0.303 (0.218)	-0.244 (0.145)
State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Additional Controls	No	Yes	No	Yes	No	Yes
<i>N</i>	6438	6395	6438	6395	6444	5863
<i>R</i> ²	0.167	0.201	0.152	0.185	0.65	0.716

Notes: In columns 1-4, the sample comprises fourth or lower birth order children who were under 5 years of age at the time of the survey and whose mothers got married between 1978 and 1997. The sample in columns 5-6 comprises children who were 5-16 years of age at the time of the survey and whose mothers got married between 1975 and 1995. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. Height-for-age is the child's height-for-age z-score. Stunted is a dummy that equals 1 if child's height-for-age z-score < -2, and is 0 otherwise. Complete years of education is the child's total years of schooling. Additional controls in columns 1-4 include dummy for urban residence, source of drinking water, type of toilet, birth order of child, mother's education and father's occupation. Additional controls in columns 5-6 include dummy for urban residence, caste category, whether poor or not, possession of any owned or cultivated land, assets index, whether in IHDS wave 1 or 2, mother's education, highest male education in the household and economic status of the natal family as compared to the husband's family. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Columns 1-4 are authors' calculations from NFHS-1&2 and columns 5-6 are authors' calculations from IHDS-1&2

Table A6: Heterogeneity by Gender (Boy vs Girl)
Anti-Dowry Laws of 1985 and Child's Outcomes (Height-for-age, Stunting and Complete Years
of Education)
(Amended States)

	Height-for-age		Stunted		Complete years of education	
	(1)	(2)	(3)	(4)	(5)	(6)
Hindu	0.0229 (0.070)	-0.0267 (0.074)	-0.0625** (0.023)	-0.0547* (0.026)	0.820* (0.423)	0.891*** (0.201)
Post*Hindu	0.0202 (0.112)	-0.00352 (0.100)	0.0205 (0.037)	0.03 (0.036)	-0.129 (0.271)	-0.1 (0.298)
Post*Hindu*Boy	-0.0283 (0.243)	0.0335 (0.232)	-0.0528 (0.069)	-0.066 (0.072)	-0.326 (0.294)	-0.26 (0.420)
State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Additional Controls	No	Yes	No	Yes	No	Yes
<i>N</i>	6438	6395	6438	6395	6444	5863
<i>R</i> ²	0.167	0.201	0.152	0.186	0.651	0.717

Notes: In columns 1-4, the sample comprises fourth or lower birth order children who were under 5 years of age at the time of the survey and whose mothers got married between 1978 and 1997. The sample in columns 5-6 comprises children who were 5-16 years of age at the time of the survey and whose mothers got married between 1975 and 1995. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. Boy is an indicator of the child being male. Height-for-age is the child's height-for-age z-score. Stunted is a dummy that equals 1 if child's height-for-age z-score < -2, and is 0 otherwise. Complete years of education is the child's total years of schooling. Additional controls in columns 1-4 include dummy for urban residence, source of drinking water, type of toilet, birth order of child, mother's education and father's occupation. Additional controls in columns 5-6 include dummy for urban residence, caste category, whether poor or not, possession of any owned or cultivated land, assets index, whether in IHDS wave 1 or 2, mother's education, highest male education in the household and economic status of the natal family as compared to the husband's family. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Columns 1-4 are authors' calculations from NFHS-1&2 and columns 5-6 are authors' calculations from IHDS-1&2

Table A7: Identification (Born by or before 1993)
Anti-Dowry Laws of 1985 and Child's Outcomes (Height-for-age, Stunting and Complete Years
of Education)
(Unamended States)

	Height-for-age		Stunted		Complete years of education	
	(1)	(2)	(3)	(4)	(5)	(6)
Hindu	0.295*** (0.070)	0.291*** (0.075)	-0.0670*** (0.020)	-0.0650*** (0.022)	1.190*** (0.211)	0.986* (0.545)
Post*Hindu	-0.284*** (0.084)	-0.300*** (0.086)	0.0584** (0.027)	0.0582** (0.024)	-0.489*** (0.136)	-0.469*** (0.128)
State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Additional Controls	No	Yes	No	Yes	No	Yes
<i>N</i>	14179	14075	14179	14075	14073	12473
<i>R</i> ²	0.182	0.2	0.166	0.185	0.313	0.457

Notes: In columns 1-4, the sample comprises fourth or lower birth order children who were born by or before 1993 and whose mothers got married between 1978 and 1997. The sample in columns 5-6 comprises children who were born by or before 1993 and whose mothers got married between 1975 and 1995. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. Height-for-age is the child's height-for-age z-score. Stunted is a dummy that equals 1 if child's height-for-age z-score < -2, and is 0 otherwise. Complete years of education is the child's total years of schooling. Additional controls in columns 1-4 include dummy for urban residence, source of drinking water, type of toilet, birth order of child, mother's education and father's occupation. Additional controls in columns 5-6 include dummy for urban residence, caste category, whether poor or not, possession of any owned or cultivated land, assets index, whether in IHDS wave 1 or 2, mother's education, highest male education in the household and economic status of the natal family as compared to the husband's family. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Columns 1-4 are authors' calculations from NFHS-1&2 and columns 5-6 are authors' calculations from IHDS-1&2

Table A8: Identification (HSA amendments)
Anti-Dowry Laws of 1985 and Child's Outcomes (Height-for-age, Stunting, and Complete Years
of Education)
(Unamended States)

	Height-for-age		Stunted		Complete years of education	
	(1)	(2)	(3)	(4)	(5)	(6)
Hindu	0.271*** (0.071)	0.262*** (0.072)	-0.0623*** (0.021)	-0.0594*** (0.022)	0.840*** (0.130)	1.055*** (0.363)
Post*Hindu	-0.266*** (0.076)	-0.283*** (0.075)	0.0513** (0.024)	0.0526** (0.023)	-0.397*** (0.093)	-0.491*** (0.086)
State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Additional Controls	No	Yes	No	Yes	No	Yes
<i>N</i>	19320	19146	19320	19146	27822	24724
<i>R</i> ²	0.178	0.198	0.167	0.187	0.62	0.712

Notes: In columns 1-4, the sample comprises fourth or lower birth order children who were under 5 years of age at the time of the survey and whose mothers got married between 1978 and 1997. The sample in columns 5-6 comprises children who were 5-16 years of age at the time of the survey and whose mothers got married between 1975 and 1995. Columns 1-6 exclude the marriage years that happened in or after 1976 in Kerala, 1986 in Andhra Pradesh, 1989 in Tamil Nadu, and 1994 in Karnataka and Maharashtra. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. Height-for-age is the child's height-for-age z-score. Stunted is a dummy that equals 1 if child's height-for-age z-score < -2, and is 0 otherwise. Complete years of education is the child's total years of schooling. Additional controls in columns 1-4 include dummy for urban residence, source of drinking water, type of toilet, birth order of child, mother's education and father's occupation. Additional controls in columns 5-6 include dummy for urban residence, caste category, whether poor or not, possession of any owned or cultivated land, assets index, whether in IHDS wave 1 or 2, mother's education, highest male education in the household and economic status of the natal family as compared to the husband's family. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Columns 1-4 are authors' calculations from IHDS-1&2 and columns 5-6 are authors' calculations from IHDS-1&2

Table A9: Anti-Dowry Laws of 1985 and Child's Outcome (Weight-for-age, Weight-for-height and Wasting)
(Unamended States)

	Weight-for-age			Weight-for-height			Wasted		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Hindu	0.0357 (0.070)	0.0556 (0.045)	0.0544 (0.050)	-0.0655 (0.074)	-0.0874** (0.041)	-0.0844** (0.041)	0.0199 (0.015)	0.0156 (0.017)	0.00978 (0.018)
Post*Hindu	-0.0126 (0.080)	-0.0166 (0.056)	-0.0243 (0.057)	0.0577 (0.084)	0.123* (0.062)	0.117* (0.060)	-0.0209 (0.018)	-0.0269 (0.018)	-0.0227 (0.018)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth order FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Mother's birth year FE × State FE	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Child's birth year FE × State FE	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Additional Controls	No	No	Yes	No	No	Yes	No	No	Yes
<i>N</i>	23671	23604	23396	18520	18440	18263	18520	18440	18263
<i>R</i> ²	0.077	0.128	0.159	0.065	0.125	0.136	0.051	0.098	0.105

Notes: The sample comprises fourth or lower birth order children who were under 5 years of age at the time of the survey and whose mothers got married between 1978 and 1997. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. Weight-for-age is the child's weight-for-age z-score. Weight-for-height is the child's weight-for-height z-score. Wasted is a dummy that equals 1 if child's weight-for-height z-score < -2, and is 0 otherwise. Additional controls include dummy for urban residence, source of drinking water, type of toilet, mother's education and father's occupation. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Authors' calculations from NFHS-1&2

Table A10: Anti-Dowry Laws of 1985 and Child's Outcome (Standardized and Primary Education)
(Unamended States)

	Standardized Education				Primary Education			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Hindu	0.351*** (0.062)	0.352*** (0.053)	0.463** (0.213)	0.357* (0.191)	0.123*** (0.022)	0.128*** (0.019)	0.210*** (0.072)	0.191** (0.074)
Post*Hindu	-0.0949 (0.059)	-0.104*** (0.038)	-0.135*** (0.037)	-0.124*** (0.042)	-0.0439** (0.020)	-0.0522*** (0.012)	-0.0540*** (0.012)	-0.0440*** (0.016)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Mother's birth year FE × State FE	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Child's birth year FE × State FE	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Additional Controls	No	No	Yes	Yes	No	No	Yes	Yes
Extended Controls	No	No	No	Yes	No	No	No	Yes
<i>N</i>	31454	31360	27987	21467	24711	24602	21894	16554
<i>R</i> ²	0.131	0.193	0.272	0.282	0.432	0.477	0.534	0.562

Notes: Columns 1-4 sample comprise children who were 5-16 years of age, columns 5-8 sample comprise children who were 8-16 years of age at the time of the survey and whose mothers got married between 1975 and 1995. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. Standardized education is the child's standardized years of schooling by their age. Primary education is a dummy that equals 1 if child's year of schooling ≥ 5, and is 0 otherwise. Additional controls include dummy for urban residence, caste category, whether poor or not, possession of any owned or cultivated land, assets index, whether in IHDS wave 1 or 2, mother's education, highest male education in the household and economic status of the natal family as compared to the husband's family. Extended controls include include birth order of the child, gender of the first child born to the same mother, the time interval between mother's marriage and first birth, and the age of the mother at first birth. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Authors' calculations from IHDS-1&2

Table A11: Robustness (Drop 1984-1987)
Anti-Dowry Laws of 1985 and Child's Outcomes (Height-for-age, Stunting, and Complete years
of education)
(Unamended States)

	Height-for-age		Stunted		Complete years of education	
	(1)	(2)	(3)	(4)	(5)	(6)
Hindu	0.272*** (0.075)	0.246*** (0.077)	-0.0704*** (0.017)	-0.0663*** (0.018)	0.886*** (0.172)	1.004** (0.426)
Post*Hindu	-0.250*** (0.092)	-0.248*** (0.091)	0.0607*** (0.022)	0.0584*** (0.021)	-0.524*** (0.132)	-0.594*** (0.119)
State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Additional Controls	No	Yes	No	Yes	No	Yes
<i>N</i>	17313	17159	17313	17159	23490	20925
<i>R</i> ²	0.189	0.209	0.172	0.193	0.632	0.73

Notes: In columns 1-4, the sample comprises fourth or lower birth order children who were under 5 years of age at the time of the survey and whose mothers got married between 1978 and 1997. The sample in columns 5-6 comprises children who were 5-16 years of age at the time of the survey and whose mothers got married between 1975 and 1995. Columns 1-6 exclude the children whose mothers married between 1984 and 1987. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. Height-for-age is the child's height-for-age z-score. Stunted is a dummy that equals 1 if child's height-for-age z-score < -2, and is 0 otherwise. Complete years of education is the child's total years of schooling. Additional controls in columns 1-4 include dummy for urban residence, source of drinking water, type of toilet, birth order of child, mother's education and father's occupation. Additional controls in columns 5-6 include dummy for urban residence, caste category, whether poor or not, possession of any owned or cultivated land, assets index, whether in IHDS wave 1 or 2, mother's education, highest male education in the household and economic status of the natal family as compared to the husband's family. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Columns 1-4 are authors' calculations from NFHS-1&2 and columns 5-6 are authors' calculations from IHDS-1&2

Table A12: Robustness (Alternate Treatment)
Anti-Dowry Laws of 1985 and Child's Outcomes (Height-for-age, Stunting, and Complete years of education) (Unamended States)

	Height-for-age		Stunted		Complete years of education	
	(1)	(2)	(3)	(4)	(5)	(6)
Hindu	0.262*** (0.048)	0.234*** (0.053)	-0.0660*** (0.014)	-0.0591*** (0.016)	0.813*** (0.162)	0.959*** (0.347)
Post*Hindu	-0.267*** (0.059)	-0.243*** (0.060)	0.0617*** (0.017)	0.0532*** (0.018)	-0.321** (0.135)	-0.355*** (0.128)
State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Additional Controls	No	Yes	No	Yes	No	Yes
<i>N</i>	22927	22729	22927	22729	30238	26952
<i>R</i> ²	0.185	0.204	0.169	0.188	0.607	0.707

Notes: In columns 1-4, the sample comprises fourth or lower birth order children who were under 5 years of age at the time of the survey and whose mothers were born between 1961 and 1980. The sample in columns 5-6 comprises children who were 5-16 years of age at the time of the survey and whose mothers were born between 1958 and 1978. The dummy Post = 1 if the child's mother was 17 years or younger in 1985, and 0 otherwise. Height-for-age is the child's height-for-age *z*-score. Stunted is a dummy that equals 1 if child's height-for-age *z*-score < -2, and is 0 otherwise. Complete years of education is the child's total years of schooling. Additional controls in columns 1-4 include dummy for urban residence, source of drinking water, type of toilet, birth order of child, mother's education and father's occupation. Additional controls in columns 5-6 include dummy for urban residence, caste category, whether poor or not, possession of any owned or cultivated land, assets index, whether in IHDS wave 1 or 2, mother's education, highest male education in the household and economic status of the natal family as compared to the husband's family. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Columns 1-4 are authors' calculations from NFHS-1&2 and columns 5-6 are authors' calculations from IHDS-1&2

Table A13: Robustness (All Birth Orders)
Anti-Dowry Laws of 1985 and Child's Outcomes (Height-for-age and Stunting)
(Unamended States)

	Height-for-age		Stunted	
	(1)	(2)	(3)	(4)
Hindu	0.244*** (0.076)	0.254*** (0.078)	-0.0508*** (0.019)	-0.0515** (0.019)
Post*Hindu	-0.256*** (0.083)	-0.284*** (0.086)	0.0456** (0.021)	0.0482** (0.020)
State FE	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes
Child's birth order FE	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	Yes	Yes	Yes	Yes
Mother's birth year FE × State FE	Yes	Yes	Yes	Yes
Child's birth year FE × State FE	Yes	Yes	Yes	Yes
Additional Controls	No	Yes	No	Yes
<i>N</i>	24198	23992	24198	23992
<i>R</i> ²	0.186	0.205	0.169	0.189

Notes: The sample comprises all children (without any restriction on birth order) who were under 5 years of age at the time of the survey and whose mothers got married between 1978 and 1997. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. Height-for-age is the child's height-for-age *z*-score. Stunted is a dummy that equals 1 if child's height-for-age *z*-score < -2, and is 0 otherwise. Additional controls include dummy for urban residence, source of drinking water, type of toilet, mother's education and father's occupation. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Authors' calculations from NFHS-1&2

Table A14: Robustness (Drop 1986&1987)
Anti-Dowry Laws of 1985 and Child's Outcomes (Height-for-age and Stunting)

	Height-for-age		Stunted	
	(1)	(2)	(3)	(4)
Hindu	0.294*** (0.071)	0.281*** (0.077)	-0.0666*** (0.021)	-0.0621*** (0.022)
Post*Hindu	-0.273*** (0.087)	-0.283*** (0.091)	0.0572** (0.024)	0.0544** (0.023)
State FE	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes
Child's birth order FE	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	Yes	Yes	Yes	Yes
Mother's birth year FE × State FE	Yes	Yes	Yes	Yes
Child's birth year FE × State FE	Yes	Yes	Yes	Yes
Additional Controls	No	Yes	No	Yes
<i>N</i>	19909	19729	19909	19729
<i>R</i> ²	0.188	0.208	0.17	0.191

Notes: The sample comprises fourth or lower birth order children who were under 5 years of age at the time of the survey and whose mothers got married between 1978 and 1997. In columns 1-4, children born to mothers who married in 1986 and 1987 are excluded. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. Height-for-age is the child's height-for-age *z*-score. Stunted is a dummy that equals 1 if child's height-for-age *z*-score < -2, and is 0 otherwise. Additional controls include dummy for urban residence, source of drinking water, type of toilet, mother's education and father's occupation. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Authors' calculations from NFHS-1&2

Table A15: Falsification Test
Anti-Dowry Laws of 1985 and Child's Outcomes (Height-for-age, Stunting, and Complete
years of education)
(Unamended States)

	Height-for-age		Stunted		Complete years of education	
	(1)	(2)	(3)	(4)	(5)	(6)
Hindu	0.232*	0.265**	-0.0573*	-0.0672**	0.933***	1.143*
	(0.117)	(0.113)	(0.030)	(0.032)	(0.272)	(0.613)
FalsePost*Hindu	0.0882	-0.00627	-0.00455	0.0166	-0.00113	-0.145
	(0.156)	(0.155)	(0.037)	(0.039)	(0.204)	(0.224)
State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE × State FE	Yes	Yes	Yes	Yes	Yes	Yes
Additional Controls	No	Yes	No	Yes	No	Yes
<i>N</i>	5908	5864	5908	5864	9685	8407
<i>R</i> ²	0.198	0.223	0.178	0.206	0.551	0.648

Notes: In columns 1-4, the sample comprises fourth or lower birth order children who were under 5 years of age at the time of the survey and whose mothers got married between 1972 and 1984. The sample in columns 5-6 comprises children who were 5-16 years of age at the time of the survey and whose mothers got married between 1970 and 1984. The dummy FalsePost = 1 if the child's mother got married after 1979, and 0 otherwise. Height-for-age is the child's height-for-age z-score. Stunted is a dummy that equals 1 if child's height-for-age z-score < -2, and is 0 otherwise. Complete years of education is the child's total years of schooling. Additional controls in columns 1-4 include dummy for urban residence, source of drinking water, type of toilet, birth order of child, mother's education and father's occupation. Additional controls in columns 5-6 include dummy for urban residence, caste category, whether poor or not, possession of any owned or cultivated land, assets index, whether in IHDS wave 1 or 2, mother's education, highest male education in the household and economic status of the natal family as compared to the husband's family. Standard errors in the parentheses are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Columns 1-4 are authors' calculations from NFHS-1&2 and columns 5-6 are authors' calculations from IHDS-1&2

Table A16: Anti-Dowry Laws of 1985 and Child's Outcomes (Height-for-age, Stunting and Complete Years of Education)
(All States)

	Height-for-age			Stunted			Complete years of education		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Hindu	0.230*** (0.058)	0.249*** (0.065)	0.226*** (0.068)	-0.0529*** (0.013)	-0.0620*** (0.017)	-0.0559*** (0.018)	0.835*** (0.145)	0.842*** (0.123)	1.029*** (0.255)
Post*Hindu	-0.212*** (0.063)	-0.245*** (0.063)	-0.253*** (0.065)	0.0376** (0.016)	0.0484*** (0.018)	0.0471*** (0.017)	-0.389*** (0.123)	-0.399*** (0.083)	-0.444*** (0.078)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mother's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Child's birth year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mother's marriage year FE × State FE	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Mother's birth year FE × State FE	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Child's birth year FE × State FE	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Additional Controls	No	No	Yes	No	No	Yes	No	No	Yes
<i>N</i>	29446	29365	29124	29446	29365	29124	37910	37804	33850
<i>R</i> ²	0.134	0.181	0.202	0.122	0.165	0.186	0.601	0.636	0.722

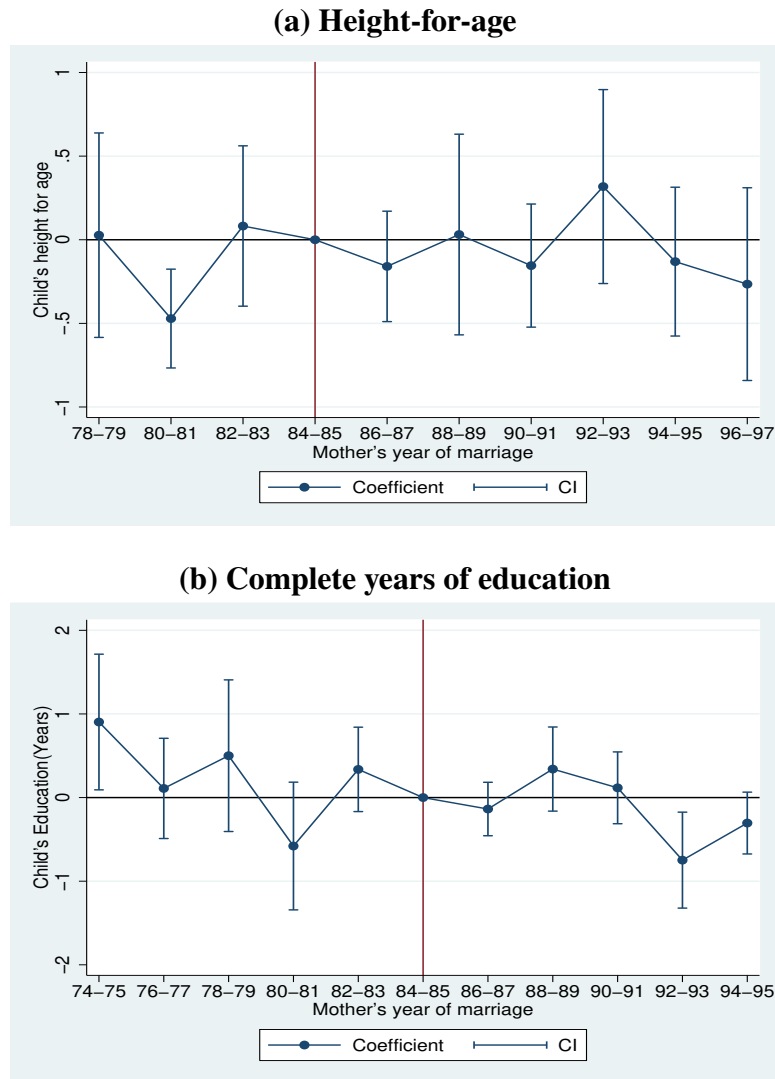
Notes: In columns 1-4, the sample comprises fourth or lower birth order children who were under 5 years of age at the time of the survey and whose mothers got married between 1978 and 1997. The sample in columns 5-6 comprises children who were 5-16 years of age at the time of the survey and whose mothers got married between 1975 and 1995. The dummy Post = 1 if the child's mother got married after 1985, and 0 otherwise. Height-for-age is the child's height-for-age *z*-score. Stunted is a dummy that equals 1 if child's height-for-age *z*-score < -2, and is 0 otherwise. Complete years of education is the child's total years of schooling. Additional controls in columns 1-4 include dummy for urban residence, source of drinking water, type of toilet, birth order of child, mother's education and father's occupation. Additional controls in columns 5-6 include dummy for urban residence, caste category, whether poor or not, possession of any owned or cultivated land, assets index, whether in IHDS wave 1 or 2, mother's education, highest male education in the household and economic status of the natal family as compared to the husband's family. Standard errors in the parenthesis are clustered by groups of state and religion.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Source: Columns 1-4 are authors' calculations from NFHS-1&2 and columns 5-6 are authors' calculations from IHDS-1&2

8 Appendix B: Figures

Figure B1: Event Study: Hindu-Muslim gap in
Child's Height-for-age and Complete years of education by Mother's year of marriage
(Amended States)

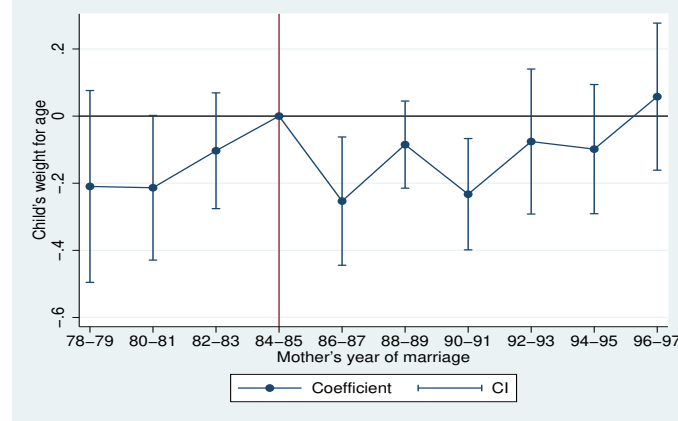


Notes: Solid dots represent the coefficient estimates (γ_t 's) on the interaction between $Hindu_i$ and 1_{it} (an indicator of the mother having married in year t) from equation 2. The years 1984-85 is the base category. The red vertical line represents the reform period (1984-85) and the vertical bars are the 95% confidence intervals.

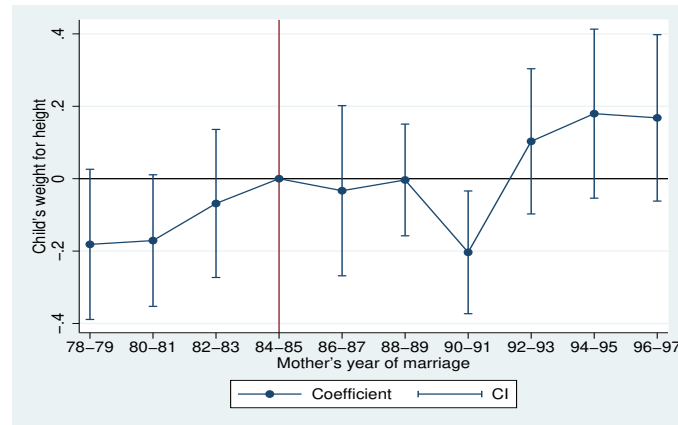
Source: Authors' calculations from NFHS-1&2 and IHDS-1&2

Figure B2: Event Study: Hindu-Muslim gap in
Child's Weight-for-age, Weight-for-height and Wasting by Mother's year of marriage
(Unamended States)

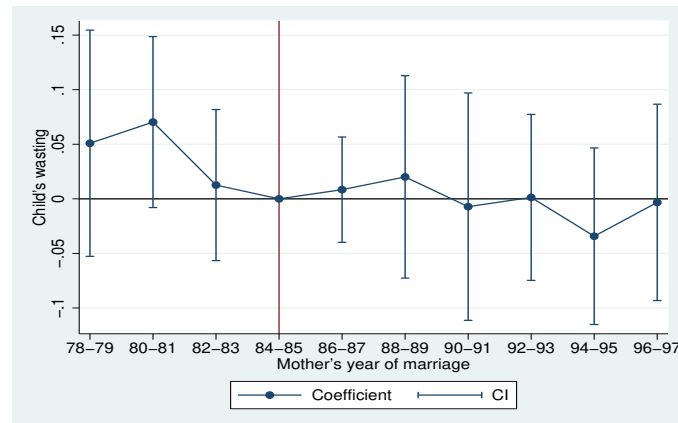
(a) Weight-for-age



(b) Weight-for-height



(c) Wasted

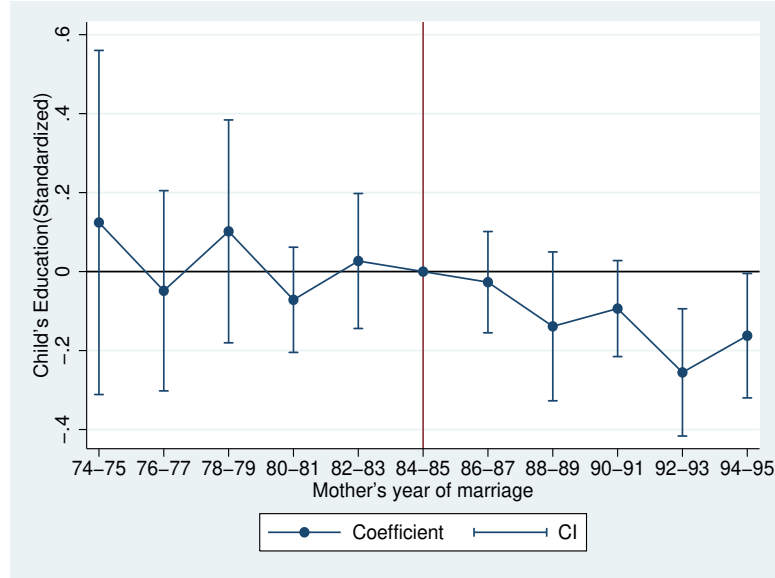


Notes: Solid dots represent the coefficient estimates (γ_t 's) on the interaction between $Hindu_i$ and $\mathbf{1}_{it}$ (an indicator of the mother having married in year t) from equation 2. The years 1984-85 is the base category. The red vertical line represents the reform period (1984-85) and the vertical bars are the 95% confidence intervals.

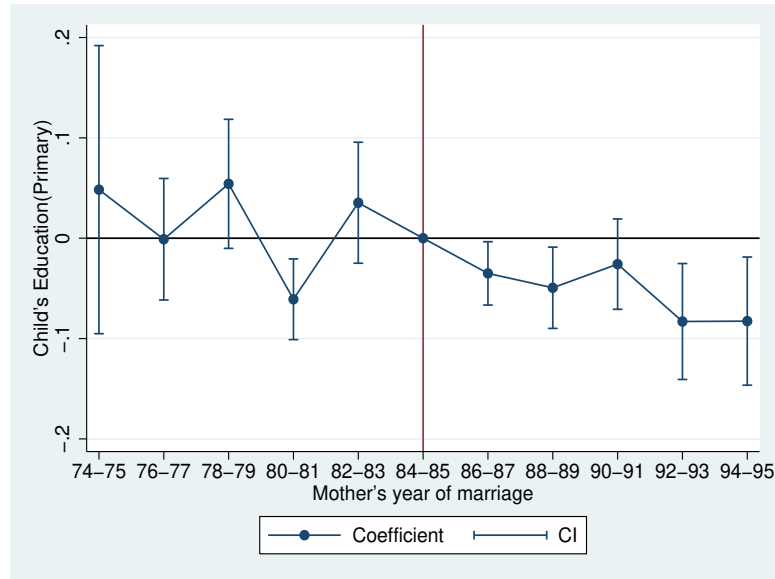
Source: Authors' calculations from NFHS-1&2

Figure B3: Event Study: Hindu-Muslim gap in
Child's Standardized and Primary education by Mother's year of marriage
(Unamended States)

(a) Standardized education



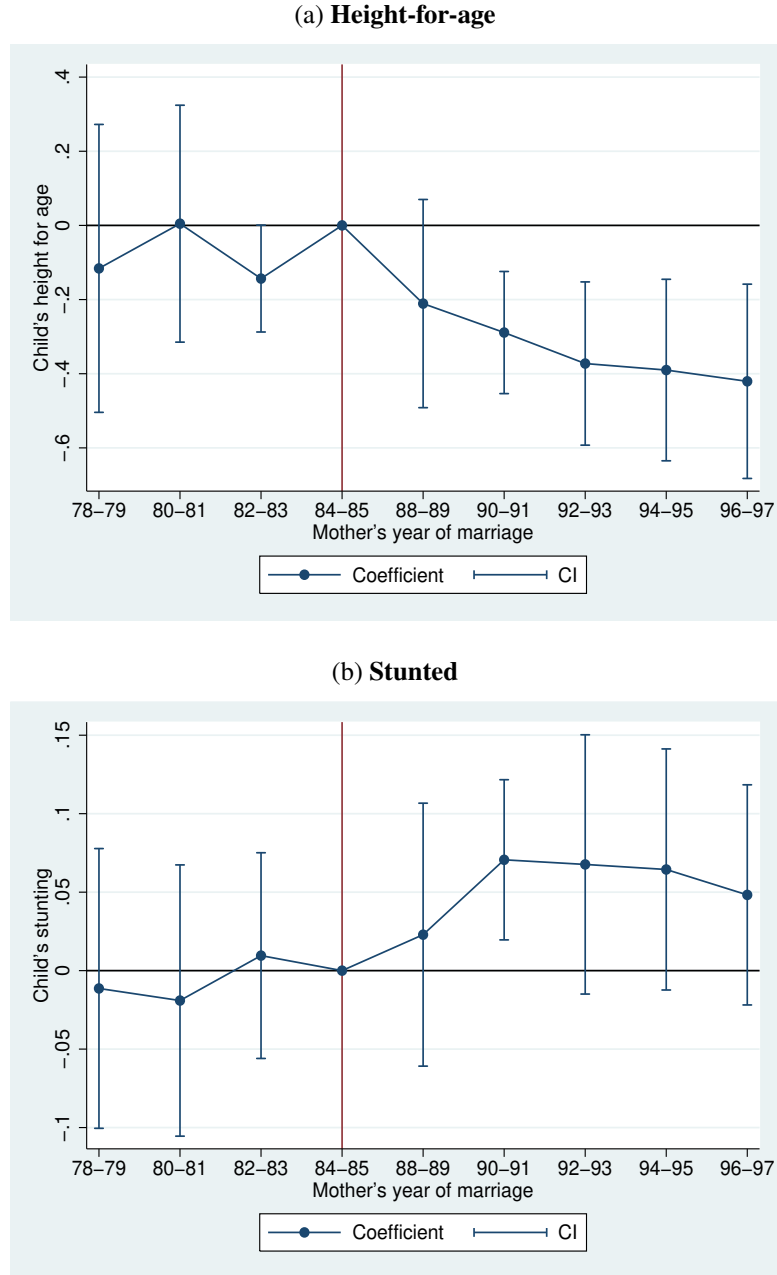
(b) Primary education



Notes: Solid dots represent the coefficient estimates (γ_t 's) on the interaction between $Hindu_i$ and 1_{it} (an indicator of the mother having married in year t) from equation 2. The years 1984-85 is the base category. The red vertical line represents the reform period (1984-85) and the vertical bars are the 95% confidence intervals.

Source: Authors' calculations from IHDS-1&2

Figure B4: Event Study(Drop 1986,1987): Hindu-Muslim gap in Child's Height-for-age and Stunting by Mother's year of marriage (Unamended States)



Notes: Solid dots represent the coefficient estimates (γ_t 's) on the interaction between $Hindu_i$ and $\mathbf{1}_{it}$ (an indicator of the mother having married in year t) from equation 2. The years 1984-85 is the base category. The red vertical line represents the reform period (1984-85) and the vertical bars are the 95% confidence intervals.

Source: Authors' calculations from NFHS-1&2

9 Appendix C: Data Details

This appendix explains how we constructed the dataset that we have used for our analysis. As mentioned in the text, we use two main data sources, namely, the National Family Health Survey (NFHS) and the India Human Development Survey (IHDS) for our analysis. We describe our treatment of these two data sources below.

9.1 The National Family Health Survey (NFHS)

We use data from the first two rounds of the NFHS to study the effect of the legal reforms (effective 1985 onwards) on health outcomes. The NFHS datasets, being nationally representative datasets that contain rich information on children's health and household demographic characteristics, were ideal for the purpose. NFHS-1 interviewed 89,777 ever-married women of reproductive age (13-49 years) residing in 88,562 households across 24 Indian states. Importantly for our study, it contained information on the year of marriage for interviewed women and their birth histories. Further, it weighed and measured children under 5 years of age.

The timing of the NFHS-1 was also appropriate for the purpose of this study. Survey work for NFHS-1 was conducted between April 1992 and September 1993. This allows us to observe the children of both women who married before 1985 and women who married after. Mindful of strong birth order effects in the Indian context ([Jayachandran and Pande \(2017\)](#)), we restrict our main analysis to fourth and lower birth order children. With this sample restriction, we have a reasonable sample size up to 1978, i.e., up to 8 years before the legal reform. This leaves us with 19,114 children for whom we have height and weight measurements from the NFHS-1.

The NFHS-1, being conducted in 1992-93, provides limited information (roughly up to 5 years) in the post-1985 period. Since we are interested in tracking the effects of the reform over a slightly longer horizon, we expanded the post-1985 sample by appending data from the NFHS-2 which was conducted in 1998-99. The NFHS-2 is very similar in structure and content to NFHS-1. It surveyed a nationally representative sample of 90,303 ever-married women of reproductive age (15-49 years) residing in 92,486 households across 26 Indian states. With the NFHS-2 data, we are able to track children for about 12 years after the reforms that took place in 1985. The NFHS-2 adds about 11,685 children to our dataset. Our final sample consists of 30,799 children for whom we have information on the mother's year of marriage and anthropometric variables like height and weight.

World Health Organization child growth standards ([WHO \(2006\)](#)) are used to create the child anthropometric measures. The height of the child is taken in centimeters(cm), weight in kilograms(kg) and age in months. We calculated height-for-age z-score, weight-for-age z-score, and weight-for-height z-score using the "zanthro" package in Stata. The WHO version of the zanthro package generates height-for-age z-score for children 0-19 years of age, weight-

for-age z -score for children 0-10 years of age and weight-for-height z -score for children 65-120 cm tall. According to WHO growth standards, if the height-for-age z -score of a child is 2 standard deviations below the reference population median¹⁷, then the child is categorized as “stunted” and if weight-for-height z -score is 2 standard deviations below the reference population median, then the child is categorized as “wasted”. Using the same reference, we created child stunting and wasting.

9.2 The Indian Human Development Survey (IHDS)

We used data from the India Human Development Survey (IHDS) to study the effect of the legal reforms of 1985 on educational attainments. The IHDS is a nationally representative panel dataset that contains information on a rich set of household characteristics such as consumption, income and work, gender relations and marital histories. Crucial to this paper, it contains detailed information on the educational attainments of schoolgoing children and the household expenditure on education.

There are two waves of the IHDS, namely IHDS-1 and IHDS-2, that are currently available. Survey work for IHDS-1 was conducted in 2004-05. It interviewed 2,15,754 individuals across 41,554 households. IHDS-2 re-interviewed approximately 83% of the original IHDS-1 households. In order to keep a stable sample size in the face of attrition, IHDS-2 interviewed an additional sample of 2,134 households. With the addition of these extra households (referred to as “refreshers”), IHDS-2 had a sample size of 2,04,569 individuals across 42,152 households.

Our objective in this project is to study the effects of the legal reforms of 1985 on the educational attainments of children. Thus, we need a large enough sample of children whose mothers married before 1985 and those whose mothers married after 1985. We are able to obtain the desired sample based on retrospective marital histories contained in IHDS-1 and IHDS-2. We obtain information on children of schoolgoing age(5-16 years) whose mothers married between 1975 and 1995 (i.e., whose mothers married up to 10 years before the legal reform and up to 10 years after the reform). Our primary data source is IHDS-1 from which we obtain information on the educational attainments of 37,149 children who meet our criterion for inclusion in the sample. To this dataset, we append information for 761 children (who meet our criterion) from refresher households in IHDS-2. This leaves us with a total sample size of 37,910 children between 5 and 16 years of age. For our results on primary school completion, we consider children who are between 8 and 16 years of age. Thus, for these regressions (Table A10, columns 5-8), we have a smaller sample size of 24,711 children. Further, we should note that our sample size varies across columns (as in columns 1-4 in Table 3) due to missing observations for some of our “additional” and “extended” controls like economic status of the natal family as compared to the husband’s family, highest male education in the

¹⁷see section 3

Table C1: Sample information of children in NFHS dataset

NFHS-1	NFHS-2	Total[⊕]
All States		
19,114	11,685	30,799
Unamended States		
14,872	9,156	24,028
Amended States		
4,242	2,529	6,771

[⊕]as fixed effects are used, some singleton observations are dropped, so the sample size in regression results differ from these numbers by a few observations.

Table C2: Sample information of children in IHDS dataset

IHDS-1	IHDS-2 refreshers	Total[⊕]
All States		
37,149	761	37,910
Unamended States		
30,732	723	31,455
Amended States		
6,417	38	6,455

[⊕]as fixed effects are used, some singleton observations are dropped, so the sample size in regression results differ from these numbers by a few observations.

household, gender of the first child born to the same mother and the time interval between mother's marriage and first birth. Finally, Table C1 and Table C2 provide brief sample size information for NFHS and IHDS datasets, respectively.