Measuring Mother's Empowerment Through Culture of Son Preference in Pakistan

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Preface

The Centre for Research in Economics and Business (CREB) was established in 2007 to conduct policy-oriented research with a rigorous academic perspective on key development issues facing Pakistan. In addition, CREB (i) facilitates and coordinates research by faculty at the Lahore School of Economics, (ii) hosts visiting international scholars undertaking research on Pakistan, and (iii) administers the Lahore School's postgraduate program leading to the MPhil and PhD degrees.

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Since the second half of 2018 we have had issues with our regular editing services, as a result of which there has been a growing backlog of working papers that had been approved by the editorial committee. To avoid further delays in dissemination of the ongoing research, we decided to publish approved but unedited working papers online. Working paper No 03-18, December 2018 was the first such paper.

Article

Measuring Mother's Empowerment Through Culture of Son Preference in Pakistan

Aimal Tanvir[1] and Rabia Arif[2]

Abstract

This paper highlights whether giving birth to a son plays a role in determining mother's empowerment in Pakistan and in particular, if the birth-order of the son has any additional impact in uplifting the mother's status within a household, using the Pakistan Demographic and Health Survey (PDHS) 2012-13. In Pakistan, the household's economic conditions make parents treat their sons and daughters differently and ultimately, giving preference to sons over daughters, in terms of education, health and nutrition, as the social and economic utility of a son, overpowers that of a daughter. In the presence of this culture of son preference, if women then give birth to a son or a number of sons, then it should help empower them. The results of the study show having a son significantly helps in empowering mothers in Pakistan. In contrast, the son's birth-order (both higher or lower) is not an important factor for improving mother's empowerment. Mother's empowerment is mainly driven by the number of sons, and age of the son, and these results are more pronounced in rural areas of Pakistan, and for mothers belonging to poor households.

Key Words: Woman empowerment; birth-order; gender; Pakistan

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1. **Introduction**

Upon marriage, when women become part of a new household, they are said to have a weaker position in terms of household decision-making, even after all the work they put into completing household chores. Existing literature highlights the various determinants[3] of women's empowerment, but literature does not provide sufficient evidence for explaining the relationship between mother's empowerment and the gender of her child, especially, in the presence of culture of son preference in Pakistan. In this paper, using a cross-sectional dataset, Pakistan Demographic and Health Survey (PDHS) 2012-13, we estimate the impact of giving birth to a son or a number of sons on the measures of women's empowerment in a household in Pakistan. In addition to this, we try to determine if there is any profound impact because of the son's birth-order on mother's empowerment. The results of the study show that son's birth-order, both higher or lower, does not seem to have an impact on mother's empowerment. These results are driven by the age of the son, and are more pronounced in rural areas and amongst poorer households.

The notion of women's empowerment relates to how power is exercised given the gender roles embedded within any society (Williams, 2005; Imai et al., 2014). Woman empowerment is defined as the degree to which a woman is able to exert control over the decisions that she makes during the course of her life. The more control she exerts, the more empowered she is said to be. These decisions range from anywhere between matters regarding her household, or about her own choices in life reflected by her individual way of thinking, or her attitudes regarding life (Kishor & Gupta, 2005). In developing countries, the status of women and hence, the extent of power that they are able to exert in the society, is strongly determined by the gender roles defined by their culture.

In Pakistan, the presence of patriarchy greatly obstructs the power of women to bargain for their rightful status and as a result, they are exploited and attributed a lower status in the society. (Isran & Isran, 2012). Therefore, to help uplift the status of women in the country, the concept of women empowerment, then becomes an important policy concern for decision-makers in Pakistan. Due to the considerations of the immense importance of males, the norms regarding son preference, especially in the developing world, are quite strong (Li & Wu, 2011; Zimmermann, 2018). Each gender has some benefits and costs associated with it, and in light of this, the parents start preferring that gender that fares better in regards to the benefits than the costs (Friedman et al., 1994).

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[3]According to Basu (2006), the act of women to engage in the labor force is in itself a result of her current relative bargaining position in the household (Amin, 1998). Therefore, an employed woman enjoys a higher degree of empowerment in comparison to an unemployed woman. Education also plays a vital role in determining woman's bargaining position in the household. The more educated the woman is, the greater chances that she will be able to get some form of paid-employment as compared to an uneducated woman, and hence, a higher status in the household (Handa,1996). Furthermore, if the wife is more educated than her husband, then she is given more control to make household decisions. (Orrefice & Bercea, 2007).

Wife's age and the relative difference between the ages of the spouses is another determinant of empowerment. (Friedberg & Webb, 2006; Mabsout & Staveren, 2016). According to Lundberg and Ward-Batts (2000), a woman is able to exert control in household decisions, if her age is more than her husband's age. Moreover, as the woman's age increases, she is given more power in the fields of decision-making, freedom to move and to govern the household resources (Mahmud et al., 2011). Likewise, women belonging to urban areas tend to have higher educational attainment, higher chances of having paid employment and better nutrition and health as compared to women residing in rural areas (Khan et al., 1999; Aslam & Kingdon, 2008). As a result, women in rural areas tend to have lower levels of empowerment as compared to women in urban areas. The motive of old-age support is also more pronounced in rural areas, especially, in China's context, where parents residing in urban areas have greater support from not only government aided social safety nets but also from improved nutrition, and better paying jobs in comparison to the rural counterpart. Moreover, in rural areas, men are given more importance as they are considered to bmore agriculturally productive as compared to women (Miller, 1987). Therefore, sons are given more importance over daughters in rural households (Gupta et al., 2003; Song & Burgard, 2008).

The utility derived from having a son can be segregated into two types, namely, economic and social utility. Economic utility is derived from sons acting as a source of security during old age and sickness. Girls once married, leave the natal home causing parents to turn to their sons for financial security and care during old age due to the inadequate supply of social safety nets in the developing world (Lambert & Rossi, 2016). Whereas, the social utility from having a son is embedded within the social norms prevalent within the society and culture of a country. For example, in the case of Pakistan, China and India, the concept of giving dowry to the daughter's husband upon marriage is widely practiced. So, son's utility outweighs the daughter's utility from the expected future dowry payments received by the son, upon marriage. Not only the dowry payments, but also the kinship and descent system help to enhance utility received from having a son. Moreover, in these countries, where such practices prevail, the birth of a son enhances the status of that family within the society as well (Dyson & Moore, 1983; Arnold et al., 1998; Brown, 2009). The lower status of daughters can further be a result of only sons being able to take the family name forward, as children are named after their fathers (Li & Wu, 2011). In Pakistan, there is a strong preference for sons as sons are said to have a higher economic return in the market (Aslam & Kingdon, 2008) and sons contribute significantly towards total household earnings and agricultural production (Miller, 1987).

In the presence of culture of son preference, giving birth to a son, uplifts the mother's position in both the household and society. Alfano (2017) provides evidence that women who have little influence over household decision-making, or the ability to control household income, rely heavily on their male offspring to secure their bargaining position in the household (Dyson & Moore, 1983; Abadian, 1996). Moreover, after the father becomes of a certain age, mothers with grown sons, are given more power in terms of decision-making; thus, highlighting the importance of gaining loyalty of sons who will become future decision makers of the household. Therefore, the presence of a son is an important determinant for improvement in woman's intra-household bargaining position (Gupta et al., 2003; Zimmermann, 2018).

Son preference may even lead to greater discrimination against girls, as many studies have identified son preference may lead to larger household sizes, suggesting, till parents reach their desired number of sons; they keep trying for additional children. Thus, causing girls present in large families to not only have access to fewer household resources but to also have lower educational and nutritional attainment (Arnold, 1992; Friedman, 1994; Pande & Astone, 2007). According to Rukanuddin (1982), this relationship of fertility behavior and preference for son also holds true for Pakistan (Khan & Sirageldin, 1977).

The rest of the paper follows the subsequent design. The next section focuses on the data description, descriptive statistics and the empirical specification used. Section 3 highlights the econometric results along with robustness checks. The final section provides concluding remarks on policies that may help in uplifting the women's status in Pakistan.

2. Methodology

2.1 Data Description

To test this relationship econometrically, Pakistan Demographic and Health survey (PDHS) 2012-2013 is used. This dataset consists of nationwide information from a sample of 12,943 households comprising of all ever-married men and women belonging to an age bracket of 15-49 years. The sampling frame consists of information at the national and provincial level, while further segregating this information on the basis of type of area i.e., rural or urban. This dataset provides detailed information on variables of household decision-making, domestic violence indicators along with household and individual level characteristics.

The primary sample for this study is limited to women who have given birth at least once suggesting, they at best have one living child. Thus, restricting our sample to 11,825 mothers out of the 13,557 women who were interviewed. Out of a sample of 11,825 women 6,194 have a first-born son (52.38%) and 5,631 have a first-born daughter (47.62%) whereas 3,464 women have a single son (29.29%).

2.2 Descriptive Statistics

Table 2 (See Appendix A) provides statistics at the individual, household and community level. On average wives are younger than their husbands with an average difference in age of more than four years. Moreover, out of the total sample, 96% of the women are married while 20% are working mothers. On average, husbands are said to be twice as much educated as compared to their wives.

At the household level, 91% of the households are led by males whereas household head's average age is 46.6 years. Moreover, the average household size is 9 and on average each woman has 4 children. 24% of the sample belongs to the richest socioeconomic class where the remaining sample belongs to the other socioeconomic classes.53% of the mothers belong to a rural area whereas the remaining sample belongs to an urban area (47%).

Figures 1(a), 1(b), 1(c) and 1(d) (See Appendix B) shows the percentage of women in Pakistan that have a say (by either making decisions alone or jointly with their husbands) in the household decision-making process. 19.62% of the women in Punjab have a say in controlling money earned by her husband as compared to 2.84% of women in Gilgit Baltistan (See Appendix B, Figure 1(d)). Taking a glance at Figure 1, the province of Punjab has the highest percentage of woman that partake in the household decisions whereas Gilgit Baltistan has the least amount of woman having a say in these decisions.

Similarly, Figures 2(a), 2(b), 2(c), 2(d), 2(e) and 2(f) (See Appendix B) show that in terms of woman's attitudes towards domestic violence, a larger percentage of women in Punjab are said to be empowered as compared to the province of Baluchistan. 28.33% of the woman in Punjab do not justify the beating of wife if she does not take permission from her husband when going out whereas only 4.05% of woman in Baluchistan do not agree to wife beating in this scenario; suggesting women of Punjab to be more empowered as compared to women of Baluchistan (See Appendix B, Figure 2(b)). These numbers suggest that women in Punjab seem to be more empowered both in

terms of the behavioral and attitudinal dimension of women's empowerment in comparison to the remaining provinces of Pakistan.

Furthermore, Figures 3(a), 3(b), 3(c) and 3(d) (See Appendix B) represents statistics for percentage of mothers influencing the household decision-making contingent on the gender of their first-born child. 26.38% of the mothers make decisions regarding their own health if they have a first-born son as compared to those mothers who have a first-born daughter (23.93%) (See Appendix B, Figure 3(a)). Again, by just taking a look at these figures one can see a greater percentage of those mothers who have a first-born son are involved in the household decisions as compared to the percentage of those mothers who have a first-born daughter.

Additionally, Figures 4a, 4b, 4c, 4d, 4e and 4f (See Appendix B) highlights the mother's attitudes towards domestic violence conditional on first-born child's gender. 36.13% of mothers with a first-born son do not justify wife's beating in the case if the in-laws were neglected as compared to 32.88% of mothers with a first-born daughter (See Appendix B, Figure 4(a)). A mere glimpse at the statistics one can see mothers with a first-born son are more empowered in terms of behavioral and attitudinal dimension as compared to mothers having a first-born daughter.

2.3 Empirical Specification

First, this paper explores the relationship between son's birth-order (both higher or lower) and mother's empowerment using the following empirical specification:

$$Mother's\ Empowerment_i = \alpha_0 + \alpha_1 2^{nd}\ birthorder_i + \alpha_2 3^{rd}\ birthorder_i$$

$$+\alpha_3 4^{th}\ birthorder\ or\ higher_i + \sum_{n=1}^{N} \beta_n X_n + \mu_i \qquad (equation\ 1)$$

Where; $Mother's\ Empowerment_i$ is the level of empowerment of the ith mother measured on a scale of 0 to 10. $2^{nd}\ birthorder_i$ is a dummy variable equal to 1 if the second-born of the ith mother is a son, and 0 otherwise. $3^{nd}\ birthorder_i$ is a dummy variable equal to 1 if the third-born of the ith mother is a son, and 0 otherwise. $4^{th}\ birthorder\ or\ higher_i$ is a dummy variable equal to 1 if the ith mother's fourth-born or a child born after four or more children is a son, and 0 otherwise. X_n are individual-level, household-level and community-level regressors.

The dependent variable is a composition of variables, measuring both mother's power to make decisions in her household (behavioral dimension) and her attitudes towards domestic violence (attitudinal dimension). Making a collective measure out of the two dimensions helps in measuring the impact of the explanatory variables on mother's overall level of empowerment. The decision-making aspect is measured using four questions regarding who decides on woman's own healthcare, large household purchases, visits to family or relatives and control over the money that the husband earns (Zimmermann, 2012; Furuta and Salway, 2006; Li and Wu, 2011; Thomas, Contreras and Frakenberg, 1999). Each decision-making variable is constructed in the form of binary variable where the variable takes on a value of 1 if the wife takes the decision alone or jointly with her husband and 0 otherwise (See Appendix A, Table 3). In order to incorporate mother's attitudes towards domestic violence, six questions have been taken into

account and the responses to each of these questions helps to deduce the mother's self-esteem and thus her level of empowerment. The wife is given 6 situations in which she is asked if she is likely to justify beating of the wife by the husband in the following situations; if she neglects the children, if she neglects the in-laws, if she burns the food, if she does not take permission from her husband when going out, if she has an argument with her husband and if she refuses sex with him (Jenson and Oster, 2009; Arestoff & Diemai, 2016). If the mother's answer is no, then she does not justify beating of the wife and she is said to be empowered. The binary variable takes on a value of 1 if the mother is empowered (i.e., if her answer is no) and 0 if the mother is not empowered (i.e., if her answer is yes). (See Appendix A, Table 3).The dependent variable is constructed using the additive methodology where all the binary variables related to decision-making and mother's attitudes towards domestic violence are summed up. Thus, creating an additive index. This index caters to both mother's extrinsic[4] and intrinsic[5] level of empowerment. Mother's overall empowerment is measured on a scale ranging from 0 to 10. A mother having a score of 10 suggests that she is highly empowered; a mother having a score of 5 suggests that she enjoys a moderate level of empowerment and a mother with a score of 0 suggests she is not at all empowered (See Appendix A, Table 3).

Second, this paper estimates the impact of number of sons regardless of their birth-order on mother's empowerment using the following equation:

$$Mother's\ Empowerment_i = \delta_0 + \delta_1 one\ son_i + \delta_2 two\ sons_i +$$

$$\delta_3 three\ sons\ or\ more_i + \delta_4 one\ daughter_i + \delta_5 two\ daughters_i + \sum_{n=1}^{N} \beta_n X_n + \mu_i \qquad (equation\ 2)$$

Where; $Mother's\ Empowerment_i$ is the level of empowerment of the ith mother measured on a scale of 0 to 10. $one\ son_i$ is a dummy variable equal to 1 is the ith mother gave birth to only one son, and 0 otherwise. $two\ sons_i$ is a dummy variable equal to 1 is the ith mother gave birth to two sons, and 0 otherwise. $three\ sons\ or\ more_i$ is a dummy variable equal to 1 is the ith mother gave birth to three or more sons, and 0 otherwise. $one\ daughter_i$ is a dummy variable equal to 1 is the ith mother gave birth to a daughter, and 0 otherwise. $two\ daughters_i$ is dummy variable equal to 1 if the ith mother gave birth to two daughters, and 0 otherwise. X_n are individual-level, household-level and community-level regressors. For both the equations, individual-level, household-level and community-level characteristics have been controlled for (See Appendix A, Table 4).

Third, the above two relationships (in equations 1 and 2) are further explored in terms of mother's age, area of residence and socioeconomic status. Lastly, this paper checks for presence of culture of son preference in Pakistan.

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[4] Behavioral dimension of woman empowerment is her ability to exert control over the household's decision-making process. Behavioral dimension is constructed directly by examining who makes the decisions regarding large household purchases, own healthcare, seeking for permission while visiting family or relatives, control of husband's earnings or observing employment for pay. (Zimmermann, 2012; Furuta and Salway, 2006; Li and Wu, 2011; Thomas, Contreras and Frakenberg, 1999)
[5] Attitudes towards domestic violence dimension are observed by collecting information based upon the woman's justification regarding the beating of the wife in situations such as; if, she does not take permission from her husband when going out, she gets into an argument with her husband, she neglects the in-laws or her own children, she refuses sex with her husband or wife burns the food that she cooks. (Jenson and Oster, 2009; Arestoff & Diemai, 2016).

3   Results

3.1 Mother's Empowerment and Son Preference

The results in second column of Table 5, suggests that having a single son (regardless of the son's birth-order) as compared to having three or more daughters, significantly increases the mother's overall level of empowerment. This suggests that a single son's economic and social utility outweighs that of three or more daughters' utility, suggesting a strong preference of sons in Pakistan. Thus, suggesting child's gender to be an important determinant of mother's overall empowerment in Pakistan.

Table 5: Impact of number of sons regardless of their birth-orders on mother's overall empowerment

Dependent Variable: *Mother's Empowerment*		
One son	0.144***	0.0741**
	(0.0311)	(0.0317)
Two sons	0.162***	0.0433
	(0.0329)	(0.0362)
Three sons or more	0.0504	0.0255
	(0.0335)	(0.0395)
One daughter	0.108***	0.0446*
	(0.0245)	(0.0252)
Two daughters	0.0413*	-0.0108
	(0.0247)	(0.0262)
Individual-Level Controls	No	Yes
Household-Level Controls	No	Yes
Community-Level Controls	No	Yes
Observations	10,743	10,711

Robust standard errors in parentheses clustered using Primary Sampling Unit (PSU)
*** p<0.01, ** p<0.05, * p<0.1
Individual-level controls include: mother's age, mother's age (squared), mother's education, mother's education (squared), difference between husband and wife's age, difference between husband and wife's education, dummy variable (=1) for single-child families, dummy variables for frequency of watching TV, mother's employment status (=1 if employed, 0 otherwise), husband's employment status (=1 if employed, 0 otherwise), age at first birth, dummy variables for marital status, consanguinity (=1 if husband and wife are related by blood, 0 otherwise) and ethnic dummies.
Household-level controls include: gender of household head (=1 for male, 0 otherwise), age of household head, number of household members, dummies for socioeconomic classes.
Community-level controls include: regional dummy (=1 if rural, 0 otherwise) and provincial dummies

Furthermore, having a single daughter (regardless of the daughter's birth-order) is more likely to improve mother's empowerment as compared to having three daughters or more. This suggests that in a society, where son preference prevails, mothers of a single daughter enjoy a higher level of empowerment as compared to mothers having three or more daughters.

Table 6: Impact of son's birth-order on mother's overall empowerment

Dependent Variable: *Mother's Empowerment*			
First-born son	0.00916		
	(0.0238)		
Second-born son		0.00477	-0.0199
		(0.0203)	(0.0247)
Third-born son		0.0486**	0.0255
		(0.0222)	(0.0252)
Fourth-born son or higher		-0.0465**	0.00234
		(0.0214)	(0.0332)
Individual-Level Controls	Yes	No	Yes
Household-Level Controls	Yes	No	Yes
Community-Level Controls	Yes	No	Yes
Observations	10,711	10,743	10,711

Robust standard errors in parentheses clustered using Primary Sampling Unit (PSU)
*** p<0.01, ** p<0.05, * p<0.1
Individual-level controls include: mother's age, mother's age (squared), mother's education, mother's education (squared), difference between husband and wife's age, difference between husband and wife's education, dummy variable (=1) for single-child families, dummy variables for frequency of watching TV, mother's employment status (=1 if employed, 0 otherwise), husband's employment status (=1 if employed, 0 otherwise), age at first birth, dummy variables for marital status, consanguinity (=1 if husband and wife are related by blood, 0 otherwise) and ethnic dummies.
Household-level controls include: gender of household head (=1 for male, 0 otherwise), age of household head, number of household members, dummies for socioeconomic classes.
Community-level controls include: regional dummy (=1 if rural, 0 otherwise) and provincial dummies

The results in the table above show that having a first-born son does not significantly help to empower mothers within Pakistan. Since, the first-born son does not help to uplift the status of mothers in households, then one might think a son belonging to a higher birth-order (i.e., having a second-born son, third-born son, or a fourth-born or higher) to have a positive and a significant impact on mother's empowerment. However, the third column of Table 6, establishes that sons belonging to higher birth-orders do not help to determine the mother's overall level of empowerment after controlling for individual-level, household-level and community level characteristics.

3.2 Mother's empowerment and son preference by mother's age, region of residence and socioeconomic status

Next, this paper examines if the results stated in the previous section vary by mother's age, region of residence and socioeconomic status.

Results in Tables 7A and 7B are based on the segregation of mothers into two age brackets; young mothers (belonging to an age bracket of 15 to 30 years) and old mothers (belonging to an age bracket of 31 to 49 years). One might be able to see some variations in the results as total sample may be overpowered by old mothers as compared to young mothers.

Table 7A: Mother's empowerment and number of sons by mother's age

Dependent Variable: *Mother's Empowerment*	*Young Mothers*	*Old Mothers*
One son	0.0504	0.0975*
	(0.0393)	(0.0581)
Two sons	-0.0439	0.0972*
	(0.0542)	(0.0583)
Three sons or more	0.0441	0.0523
	(0.0689)	(0.0604)
One daughter	0.0111	0.0637*
	(0.0359)	(0.0348)
Two daughters	-0.000617	-0.0359
	(0.0443)	(0.0338)
Individual-Level Controls	Yes	Yes
Household-Level Controls	Yes	Yes
Community-Level Controls	Yes	Yes
Observations	4,403	6,302

Robust standard errors in parentheses clustered using Primary Sampling Unit (PSU)

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

Individual-level controls include: mother's age, mother's age (squared), mother's education, mother's education (squared), difference between husband and wife's age, difference between husband and wife's education, dummy variable (=1) for single-child families, dummy variables for frequency of watching TV, mother's employment status (=1 if employed, 0 otherwise), husband's employment status (=1 if employed, 0 otherwise), age at first birth, dummy variables for marital status, consanguinity (=1 if husband and wife are related by blood, 0 otherwise) and ethnic dummies.

Household-level controls include: gender of household head (=1 for male, 0 otherwise), age of household head, number of household members, dummies for socioeconomic classes.

Community-level controls include: regional dummy (=1 if rural, 0 otherwise) and provincial dummies

Table 7A, the number of sons (without accounting for their birth-order) significantly helps to improve the empowerment of older mothers. This suggests that mothers belonging to an age bracket of 31 to 49 years are more likely to experience an uplift in their empowerment if she has a single son or two sons as compared to having three or more daughters. These findings are in line with literature, as usually fathers in the presence of an older son, start to give more power to the mother especially in terms of household decision making (Gupta et al., 2003; Zimmermann, 2018). This makes the presence of an older son an important determinant of mother's empowerment. However, in Table 7B, after restricting the age of the mother, the son's birth-order does not does not play a role in enhancing the mother's empowerment in Pakistan and this result is consistent for both, young and old mothers.

Table 7B: Mother's empowerment and son's birth-order by mother's age

Dependent Variable: *Mother's Empowerment*	*Young Mothers*	*Old Mothers*
Second-born son	-0.0663	0.00176
	(0.0418)	(0.0299)
Third-born son	0.00108	0.0385
	(0.0481)	(0.0290)
Fourth-born son or higher	-0.0531	0.0517
	(0.0589)	(0.0438)
Individual-Level Controls	Yes	Yes
Household-Level Controls	Yes	Yes
Community-Level Controls	Yes	Yes
Observations	4,403	6,302

Robust standard errors in parentheses clustered using Primary Sampling Unit (PSU)
*** p<0.01, ** p<0.05, * p<0.1
Individual-level controls include: mother's age, mother's age (squared), mother's education, mother's education (squared), difference between husband and wife's age, difference between husband and wife's education, dummy variable (=1) for single-child families, dummy variables for frequency of watching TV, mother's employment status (=1 if employed, 0 otherwise), husband's employment status (=1 if employed, 0 otherwise), age at first birth, dummy variables for marital status, consanguinity (=1 if husband and wife are related by blood, 0 otherwise) and ethnic dummies.
Household-level controls include: gender of household head (=1 for male, 0 otherwise), age of household head, number of household members, dummies for socioeconomic classes.
Community-level controls include: regional dummy (=1 if rural, 0 otherwise) and provincial dummies

Tables 6 and 7B suggest that the birth-order of sons does not seem to improve mother's overall empowerment. However, one might believe that since household dynamics, family structure as well as traditions vary across rural and urban areas of Pakistan, so, one might be able to see different results for this relationship across these regions.

Table 8A suggests, having a single son in a rural area is more likely to enhance mother's overall empowerment in comparison to having three or more daughters.

Table 8A: Mother's empowerment and number of sons by region

Dependent Variable: *Mother's Empowerment*	Rural	Urban
One son	0.0981**	0.0593
	(0.0440)	(0.0474)
Two sons	0.0585	0.0384
	(0.0524)	(0.0526)
Three sons or more	0.0838	-0.0310
	(0.0533)	(0.0604)
One daughter	0.0601*	0.0466
	(0.0344)	(0.0378)
Two daughters	-0.0230	0.00165
	(0.0363)	(0.0382)
Individual-Level Controls	Yes	Yes
Household-Level Controls	Yes	Yes
Community-Level Controls	Yes	Yes
Observations	5,666	5,045

Robust standard errors in parentheses clustered using Primary Sampling Unit (PSU)
*** p<0.01, ** p<0.05, * p<0.1
Individual-level controls include: mother's age, mother's age (squared), mother's education, mother's education (squared), difference between husband and wife's age, difference between husband and wife's education, dummy variable (=1) for single-child families, dummy variables for frequency of watching TV, mother's employment status (=1 if employed, 0 otherwise), husband's employment status (=1 if employed, 0 otherwise), age at first birth, dummy variables for marital status, consanguinity (=1 if husband and wife are related by blood, 0 otherwise) and ethnic dummies.
Household-level controls include: gender of household head (=1 for male, 0 otherwise), age of household head, number of household members, dummies for socioeconomic classes.
Community-level controls include: regional dummy (=1 if rural, 0 otherwise) and provincial dummies

The results in Table 8B show that the birth-order of sons does not seem to have an impact on mother's overall empowerment after controlling for the mother's region of residence, i.e., rural and urban.

Table 8B: Mother's empowerment and son's birth-order by region

Dependent Variable: *Mother's Empowerment*	Rural	Urban
Second-born son	-0.0373	0.00562
	(0.0344)	(0.0343)
Third-born son	0.0142	0.0531
	(0.0342)	(0.0378)
Fourth-born son or higher	0.0453	-0.0510
	(0.0468)	(0.0469)
Individual-Level Controls	Yes	Yes
Household-Level Controls	Yes	Yes
Community-Level Controls	Yes	Yes
Observations	5,666	5,045

Robust standard errors in parentheses clustered using Primary Sampling Unit (PSU)
*** p<0.01, ** p<0.05, * p<0.1
Individual-level controls include: mother's age, mother's age (squared), mother's education, mother's education (squared), difference between husband and wife's age, difference between husband and wife's education, dummy variable (=1) for single-child families, dummy variables for frequency of watching TV, mother's employment status (=1 if employed, 0 otherwise), husband's employment status (=1 if employed, 0 otherwise), age at first birth, dummy variables for marital status, consanguinity (=1 if husband and wife are related by blood, 0 otherwise) and ethnic dummies.
Household-level controls include: gender of household head (=1 for male, 0 otherwise), age of household head, number of household members, dummies for socioeconomic classes. Community-level controls include: regional dummy (=1 if rural, 0 otherwise) and provincial dummies

Results in Tables 9A and 9B highlight that son's birth-order is again not an important determinant of mother's empowerment rather the presence of a son (regardless of the birth-order) significantly helps in improving the mother's empowerment in the richer and poorer socioeconomic classes.

Table 9A: Mother's empowerment and number of sons by socioeconomic status

Dependent Variable: *Mother's Empowerment*	Richest	Richer	Middle	Poorer	Poorest
One son	0.0491	0.138**	0.0536	0.182**	0.0390
	(0.0655)	(0.0694)	(0.0688)	(0.0720)	(0.0735)
Two sons	0.0273	0.0683	0.101	0.178**	-0.0526
	(0.0747)	(0.0784)	(0.0794)	(0.0897)	(0.0769)
Three sons or more	-0.0347	0.00414	-0.000723	0.265***	0.0386
	(0.0829)	(0.0874)	(0.0826)	(0.0861)	(0.0856)
One daughter	0.0200	0.0928	0.0176	0.0226	0.106*
	(0.0473)	(0.0576)	(0.0548)	(0.0614)	(0.0604)
Two daughters	-0.0554	0.0112	0.0428	-0.105*	0.0536
	(0.0605)	(0.0637)	(0.0611)	(0.0623)	(0.0599)
Individual-Level Controls	Yes	Yes	Yes	Yes	Yes
Household-Level Controls	Yes	Yes	Yes	Yes	Yes
Community-Level Controls	Yes	Yes	Yes	Yes	Yes
Observations	2,635	2,143	2,036	2,044	1,969

Robust standard errors in parentheses clustered using Primary Sampling Unit (PSU)
*** p<0.01, ** p<0.05, * p<0.1
Individual-level controls include: mother's age, mother's age (squared), mother's education, mother's education (squared), difference between husband and wife's age, difference between husband and wife's education, dummy variable (=1) for single-child families, dummy variables for frequency of watching TV, mother's employment status (=1 if employed, 0 otherwise), husband's employment status (=1 if employed, 0 otherwise), age at first birth, dummy variables for marital status, consanguinity (=1 if husband and wife are related by blood, 0 otherwise) and ethnic dummies.
Household-level controls include: gender of household head (=1 for male, 0 otherwise), age of household head, number of household members, dummies for socioeconomic classes.
Community-level controls include: regional dummy (=1 if rural, 0 otherwise) and provincial dummies

Table 9B: Mother's empowerment and son's birth-order by socioeconomic status

Dependent Variable: *Mother's Empowerment*	Richest	Richer	Middle	Poorer	Poorest
Second-born son	0.0336	0.0404	0.0215	-0.0586	-0.0651
	(0.0508)	(0.0540)	(0.0526)	(0.0567)	(0.0496)
Third-born son	0.0694	0.0782	-0.0752	0.0657	0.0720
	(0.0582)	(0.0576)	(0.0572)	(0.0529)	(0.0533)
Fourth-born son or higher	-0.0193	-0.0261	0.0925	-0.0802	0.0904
	(0.0677)	(0.0772)	(0.0784)	(0.0852)	(0.0796)
Individual-Level Controls	Yes	Yes	Yes	Yes	Yes
Household-Level Controls	Yes	Yes	Yes	Yes	Yes
Community-Level Controls	Yes	Yes	Yes	Yes	Yes
Observations	2,635	2,143	2,036	2,044	1,969

Robust standard errors in parentheses clustered using Primary Sampling Unit (PSU)
*** $p<0.01$, ** $p<0.05$, * $p<0.1$
Individual-level controls include: mother's age, mother's age (squared), mother's education, mother's education (squared), difference between husband and wife's age, difference between husband and wife's education, dummy variable (=1) for single-child families, dummy variables for frequency of watching TV, mother's employment status (=1 if employed, 0 otherwise), husband's employment status (=1 if employed, 0 otherwise), age at first birth, dummy variables for marital status, consanguinity (=1 if husband and wife are related by blood, 0 otherwise) and ethnic dummies.
Household-level controls include: gender of household head (=1 for male, 0 otherwise), age of household head, number of household members, dummies for socioeconomic classes.
Community-level controls include: regional dummy (=1 if rural, 0 otherwise) and provincial dummies

Number of sons becomes an important determinant of mother's empowerment in the poorer socioeconomic class as these households require a greater number of family members in the future to work and contribute to the total family earnings. Since, son's labor market returns are higher in comparison to daughters, so in this particular class, not only having a single son is important but having two sons and having three or more sons are highly important. In the poorer class, greater the quantity of sons, larger the total amount of future income earners of the family and hence, higher the mother's empowerment.

3.3 Does culture of son preference exist in Pakistan?

Literature suggests that one way of observing son preference within a society is through analyzing the fertility patterns of parents based on their preferences. This suggests that parents upon the birth of their daughter will have a greater desire for additional children in order to have at least a single son. Thus, causing daughters in such households to have more siblings until the parents have their desired number of total sons (Khan & Sirageldin, 1977; Rukanuddin 1982; Friedman et al., 1994).

Table 12 provides results which are quite similar to the theory discussed above. A mother with a first-born son has a decreased desire for additional children in comparison to a first-born daughter. Moreover, if a mother has a first-born daughter, then she is more likely to desire for additional children as compared to having a first-born son. This desire for additional children is translated into the total number of children that a couple has. Since desire for additional children may change from time to time but looking at the results for total number of children born to a couple provides insights to actually what has happened.

Third and fourth columns of Table 12, reconfirms this desire for additional children notion. A mother having a first-born son is less likely to have a higher number of total children as compared to having a first-born daughter. Moreover, a mother having a first-born daughter is more likely to have a higher number of total children as compared to having a first-born son. These results point towards prevalence of son preference in Pakistan. These results further provide evidence for Table 6, suggesting, the results presented in it are not a result of parents wanting a gender balance amongst their children, rather, are a result of culture of son preference in Pakistan. This is because parent's desire for additional children falls upon the birth of a son but increases upon the birth of a daughter. If parents wanted a gender balance amongst their children, then parent's desire for additional children should have increased upon the birth of their son in order to have a daughter to balance out the family. Moreover, Table 7B presented earlier also suggests that parents do not desire to balance out the gender composition of their family, because coefficient of two sons clearly show that the empowerment of the mother increases even if she does not have a daughter.

3.4 Robustness Checks

Mother's overall empowerment comprises of her intrinsic (attitudes towards domestic violence) and extrinsic (involvement in the household decision-making process) level of empowerment. In order to see if son preference has an impact on individual variables which are used to construct the overall level of empowerment; individual regressions are run with each of the ten variables where four of these variables relate to mother's decision-making power and the remaining six to the mother's attitudes towards domestic violence.

Tables in appendix A.1 and A.2 represents results for the impact of number of sons and son's birth-order on mother's decision-making power, respectively. Table in appendix A.1 explains the relationship of number of sons to individual aspects of mother's decision-making power. This confirms the initial findings proposed by this paper, suggesting the number of sons regardless of the order they are born in is more likely to have a statistically significant and a positive impact on mother's individual decision-making characteristics. The results in Table in appendix A.2 suggest that mother's individual decision-making variables (extrinsic empowerment) are not significantly impacted by whether the son belongs to a lower or a higher birth-order. This again supports the initial results proposed by this paper; thus, confirming that even at the individual level this relationship does not seem to hold true

Tables in appendix B.1 and B.2 represents results for the impact of number of sons and son's birth-order on mother's intrinsic level of empowerment reflected by justification of beating in situations such as; if the in-laws are neglected, if she does not take permission from her husband when going out, if she neglects the children, if she argues with her husband, refuses to have a physical relationship and lastly, if burns the food that she cooked.

 Mothers who have a single son, two sons or more than three sons tend to justify the wife's beating (in scenarios; if she, neglects the in-laws, argues with her husband and refuses to have sex) to a lower degree as compared to having three or more daughters. Furthermore, having a son or two sons is an important determinant for the mother to not justify beating if she neglects the children as compared to three daughters or more. A single son can greatly enhance the mother's intrinsic level of empowerment by not justifying beating in the scenario if she does

not take permission from her husband when going out. In regards to both intrinsic and extrinsic empowerment son's birth-order does not seem to play a role; however, number of sons significantly and positively impacts both, mother's decision-making power and her attitudes towards domestic violence.

Tables in appendix C.1 and C.2 looks upon aggregate measures of both decision-making and mother's attitudes towards domestic violence. Appendix C.1 suggests having a single son, two sons or having three or more sons significantly improves mother's decision-making power. Just having a single son helps in empowering mothers to a greater degree as those mothers are less likely to justify beating in any of the six scenarios. Thus, presence of a son within the household helps to empower mothers both in terms of household decision-making and her attitudes towards domestic violence. However, appendix C.2 suggests that son's birth-order (both lower and higher) to not significantly affect both mother's bargaining power and her attitudes towards domestic violence.

To further verify the relationship established above, another measure of woman empowerment is used in which the variables used to define mother's attitudes towards domestic violence has been constructed in the form of a binary variable where if the mother has not justified beating in any of the scenarios, then it takes on a value of 1 suggesting the mother does not seem to give in to domestic violence and she is said to be empowered. If she has said yes to any one of the questions, then the variable takes on a value of 0 suggesting she attributes a lower status to herself resulting in lower self-esteem and thus having a lower level of empowerment all together. Tables in appendix D.1 and D.2 again point towards the same relationship established above where the number of sons, whether she has a single son, two sons or three sons or more helps in improving her empowerment more as compared to having three or more daughters. However, son's birth-order whether higher or lower does not seem to play a role in empowering the mother.

5   Conclusion

The results of the study highlight how the child's gender helps in enhancing the status of the mother especially in the presence of culture of son preference in Pakistan. The son's birth-order both higher or lower does not seem to have an impact on mother's empowerment which is a result of not having a proper population policy in place that constraints the number of children born to a particular couple. This suggested relationship does not change according to the age of the mother, the region in which she resides or the socioeconomic class she belongs too.

In contrast, having a son without catering for that son's birth-order helps to significantly improve mother's overall empowerment. A potential reason for this relationship could be, in the presence of son preference, the total utility (both economic and social utility) that the parents attain from having a single son is far greater than having three or more daughters. An older son is more likely to enhance older mother's empowerment; as fathers in the presence of an older son start to give more power to the mother especially in terms of household decision making. This relationship becomes more pronounced if the mother belongs to a rural area, where sons are considered to be more agriculturally productive particularly in terms of farming. Moreover, the greater the number of sons the mother has in the poorer socioeconomic class, the more likely she is to enjoy a higher level of empowerment. The mother in

this regard makes a contribution in terms of increasing the number of future earners of the family. Thus, enhancing her status in the household. Moreover, son preference holds true for the case of Pakistan, suggesting, the prevalence of gender discrimination. Gender discrimination has been deeply rooted within the gender roles dominant in our societies. This phenomenon works in the favor of sons and proves to be a source of disadvantage for daughters. Gender discrimination along with son preference puts mothers of daughters at a disadvantage in terms of both decreased household decision-making and lowered self-esteem. As a result, policies should be made to eradicate both gender discrimination and the culture of son preference. Since, both these cultures are deeply embedded within the societies of Pakistan so its complete eradication is likely to take a longer period of time and the process in itself can prove to be quite difficult as unequal opportunities lead to notion known as the inequality trap. Countries with preexisting inequalities tend to get sucked into this trap giving rise to greater inequalities and resulting in unfavorable outcomes to the women along with their family members which further affects the country as whole (Global Monitoring Report, 2007).

In order to eradicate such practices, one needs to implement policies which help in improving the economic benefits of having a daughter. World Bank Group Gender Strategy suggests measures on how to eradicate gender inequality and help countries to make progress towards increased women empowerment. This can be done by improving woman's access to healthcare; eradicating gender-driven gap in the field of education, providing social safety nets for women in particular which not only helps them in easing the burden of poverty but will further provide aid in empowering them (World Bank Group Gender Strategy (FY 16-23): Gender Equality, Poverty Reduction, and Inclusive Growth). Additionally, policy-makers should try to encourage women to increase their participation in the labor force by providing equal employment opportunities and wages. Likewise, equal educational opportunities can also help decrease gender discrimination, where well-educated girls have greater chances of being employed and hence enjoy a high labor market return (UNDP, 2013). By, removing gender discrimination, not only would there be a reduction in the culture of giving preference to sons, but it is more likely to enhance mother's empowerment by improving their status in the society.

Furthermore, countries which prefer development should make efforts to make investments which not only help to empower women. These investments deem fit in the context of fairness and efficiency. Additionally, gender parity and empowered women are two important contributing factors to help reduce poverty and achieve a high economic growth rate along with helping to achieve the first six MDGs[6] (Global Monitoring Report, 2007).

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[6] MDG1 relates to poverty reduction; MDG2 relates to universal primary education; MDG3 relates to promotion of gender parity; MDG4 relates to lower under-five mortality; MDG5 relates to improved maternal health; MDG6 relates to lower likelihood of contracting HIV/AIDS.

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Appendix

Mother's Decision-Making Power				
Table A.1: Impact of number of sons on mother's decision-making power				
	Mother's Own Health Care	Large Household Purchases	Visiting Family Relatives	Control Over Husband's Money
One son	0.124***	0.114***	0.109**	0.106**
	(0.0429)	(0.0440)	(0.0444)	(0.0424)
Two sons	0.112**	0.108**	0.102**	0.125***
	(0.0448)	(0.0490)	(0.0484)	(0.0459)
Three sons or more	0.0863*	0.0848*	0.0748	0.0851*
	(0.0479)	(0.0496)	(0.0504)	(0.0499)
One daughter	0.0806***	0.0567*	0.0806***	0.0439
	(0.0308)	(0.0316)	(0.0304)	(0.0301)
Two daughters	0.0436	0.0143	0.0370	0.0138
	(0.0330)	(0.0327)	(0.0330)	(0.0338)
Individual-Level Controls	Yes	Yes	Yes	Yes
Household-Level Controls	Yes	Yes	Yes	Yes
Community-Level Controls	Yes	Yes	Yes	Yes
Observations	11,306	11,309	11,309	11,244

Table A.2: Impact of son's birth-order on mother's decision-making power				
Second-born son	-0.0264	0.00485	-0.000867	-0.00240
	(0.0306)	(0.0300)	(0.0302)	(0.0295)
Third-born son	0.0201	0.0264	-0.0144	0.0232
	(0.0311)	(0.0297)	(0.0293)	(0.0298)
Fourth-born son or higher	0.0353	0.0309	0.0240	0.0414
	(0.0416)	(0.0415)	(0.0390)	(0.0403)
Individual-Level Controls	Yes	Yes	Yes	Yes
Household-Level Controls	Yes	Yes	Yes	Yes
Community-Level Controls	Yes	Yes	Yes	Yes
Observations	11,306	11,309	11,309	11,244

Robust standard errors in parentheses clustered using Primary Sampling Unit (PSU)
*** $p<0.01$, ** $p<0.05$, * $p<0.1$
Individual-level controls include: mother's age, mother's age (squared), mother's education, mother's education (squared), difference between husband and wife's age, difference between husband and wife's education, dummy variable (=1) for single-child families, dummy variables for frequency of watching TV, mother's employment status (=1 if employed, 0 otherwise), husband's employment status (=1 if employed, 0 otherwise), age at first birth, dummy variables for marital status, consanguinity (=1 if husband and wife are related by blood, 0 otherwise) and ethnic dummies.
Household-level controls include: gender of household head (=1 for male, 0 otherwise), age of household head, number of household members, dummies for socioeconomic classes.
Community-level controls include: regional dummy (=1 if rural, 0 otherwise) and provincial dummies

Note: Each variable takes on a value of 1 if the mother makes the decision either alone or jointly with her husband and 0 otherwise. The decision-making power of the mother is analyzed in terms of decisions regarding mother's own health care, large household purchases, visits to family relatives and control over the money that the husband earns.

		Mother's Attitudes Towards Domestic Violence				
Table B.1: Impact of number of sons on mother's attitudes towards domestic violence						
	Neglected In-laws	Goes out without Husband's Permission	Neglects Children	Argues with husband	Refuses Sex	Burns food
One son	0.141***	0.159***	0.141***	0.184***	0.117***	0.0683
	(0.0431)	(0.0403)	(0.0433)	(0.0440)	(0.0420)	(0.0480)
Two sons	0.108**	0.0438	0.0921*	0.165***	0.129***	0.0481
	(0.0471)	(0.0478)	(0.0492)	(0.0469)	(0.0473)	(0.0527)
Three sons or more	0.138***	0.0434	0.0611	0.170***	0.140***	0.0539
	(0.0496)	(0.0515)	(0.0514)	(0.0512)	(0.0510)	(0.0559)
One daughter	0.0390	0.0488	0.0580*	0.0111	0.0576*	0.0397
	(0.0344)	(0.0335)	(0.0345)	(0.0336)	(0.0319)	(0.0384)
Two daughters	0.000925	-0.0170	0.0277	0.0246	0.0138	0.000183
	(0.0348)	(0.0345)	(0.0341)	(0.0330)	(0.0345)	(0.0368)
Table B.2: Impact of son's birth-order on mother's attitudes towards domestic violence						
Second-born son	-0.00365	0.0151	0.000175	0.00819	0.0473	-0.0343
	(0.0320)	(0.0328)	(0.0311)	(0.0310)	(0.0327)	(0.0348)
Third-born son	0.0542	0.0338	0.0381	0.0241	0.0488	0.0247
	(0.0331)	(0.0323)	(0.0319)	(0.0323)	(0.0327)	(0.0371)
Fourth-born son or higher	0.00525	-0.0710	-0.0162	0.00600	-0.00566	-0.0318
	(0.0454)	(0.0450)	(0.0442)	(0.0428)	(0.0435)	(0.0507)
Individual-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Household-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Community-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11,071	11,129	11,161	11,149	10,965	11,138

Robust standard errors in parentheses clustered using Primary Sampling Unit (PSU)
*** p<0.01, ** p<0.05, * p<0.1
Individual-level controls include: mother's age, mother's age (squared), mother's education, mother's education (squared), difference between husband and wife's age, difference between husband and wife's education, dummy variable (=1) for single-child families, dummy variables for frequency of watching TV, mother's employment status (=1 if employed, 0 otherwise), husband's employment status (=1 if employed, 0 otherwise), age at first birth, dummy variables for marital status, consanguinity (=1 if husband and wife are related by blood, 0 otherwise) and ethnic dummies.
Household-level controls include: gender of household head (=1 for male, 0 otherwise), age of household head, number of household members, dummies for socioeconomic classes.
Community-level controls include: regional dummy (=1 if rural, 0 otherwise) and provincial dummies
Note: These variables are constructed in a manner so that each variable takes on a value of 1 if the mother does not justify beating and takes on a value of 0 if she states that beating in any of the situations is justified. Thus, a value of 1 suggests the mother is empowered and 0 otherwise.

Mother's Decision-Making Power Index and Attitudes Towards Domestic Violence Index using Additive Score Method				
Table C.1: Impact of number of sons on mother's empowerment				
	Additive decision-making index		*Additive does not justify domestic violence index*	
	Ordered Probit	Tobit	Ordered Probit	Tobit
One son	0.0800**	0.201***	0.0863**	0.151**
	(0.0365)	(0.0778)	(0.0365)	(0.0712)
Two sons	0.0689*	0.182**	0.0298	0.0707
	(0.0384)	(0.0813)	(0.0412)	(0.0827)
Three sons or more	0.0406	0.162*	0.0382	0.0907
	(0.0419)	(0.0883)	(0.0437)	(0.0899)
One daughter	0.0493*	0.113**	0.0241	0.0408
	(0.0261)	(0.0537)	(0.0298)	(0.0593)
Two daughters	0.00161	0.0199	-0.0255	-0.0320
	(0.0281)	(0.0577)	(0.0289)	(0.0595)
Table C.2: Impact of son's birth-order on mother's empowerment				
Second-born son	-0.0142	-0.0153	-0.0131	-0.0357
	(0.0253)	(0.0521)	(0.0256)	(0.0541)
Third-born son	0.00348	0.0128	0.0231	0.0443
	(0.0259)	(0.0516)	(0.0283)	(0.0585)
Fourth-born son or higher	0.0181	0.0638	-0.0188	-0.0147
	(0.0351)	(0.0704)	(0.0371)	(0.0757)
Individual-Level Controls	Yes	Yes	Yes	Yes
Household-Level Controls	Yes	Yes	Yes	Yes
Community-Level Controls	Yes	Yes	Yes	Yes
Observations	11,238	11,238	10,780	10,780

Robust standard errors in parentheses clustered using Primary Sampling Unit (PSU)
 *** $p<0.01$, ** $p<0.05$, * $p<0.1$
Individual-level controls include: mother's age, mother's age (squared), mother's education, mother's education (squared), difference between husband and wife's age, difference between husband and wife's education, dummy variable (=1) for single-child families, dummy variables for frequency of watching TV, mother's employment status (=1 if employed, 0 otherwise), husband's employment status (=1 if employed, 0 otherwise), age at first birth, dummy variables for marital status, consanguinity (=1 if husband and wife are related by blood, 0 otherwise) and ethnic dummies.
Household-level controls include: gender of household head (=1 for male, 0 otherwise), age of household head, number of household members, dummies for socioeconomic classes.
Community-level controls include: regional dummy (=1 if rural, 0 otherwise) and provincial dummies
Note: Additive decision-making index ranges from 0 to 4 where a mother having a score of zero means she does not have a say in the decision-making process and a score of 4 suggests she is highly involved in the decision-making process.
Additive does not justify domestic violence index ranges from 0 to 6 where a mother having a score of zero means she justifies domestic violence and is not empowered. Similarly, a score of 6 suggests she is highly empowered.

Attitudes Towards Domestic Violence constructed using a binary variable approach	
Table D.1: Impact of number of sons on attitudes towards domestic violence	
	Does not justify domestic violence(=1)
Second-born son	0.0358
	(0.0296)
Third-born son	0.0453
	(0.0314)
Fourth-born son or higher	-0.0135
	(0.0408)
Table D.2: Impact of son's birth-order on attitudes towards domestic violence	
One son	0.154***
	(0.0419)
Two sons	0.124***
	(0.0457)
Three sons or more	0.113**
	(0.0502)
One daughter	0.0436
	(0.0311)
Two daughters	0.00468
	(0.0339)
Individual-Level Controls	Yes
Household-Level Controls	Yes
Community-Level Controls	Yes
Observations	11,244

Robust standard errors in parentheses clustered using Primary Sampling Unit (PSU)
*** p<0.01, ** p<0.05, * p<0.1
Individual-level controls include: mother's age, mother's age (squared), mother's education, mother's education (squared), difference between husband and wife's age, difference between husband and wife's education, dummy variable (=1) for single-child families, dummy variables for frequency of watching TV, mother's employment status (=1 if employed, 0 otherwise), husband's employment status (=1 if employed, 0 otherwise), age at first birth, dummy variables for marital status, consanguinity (=1 if husband and wife are related by blood, 0 otherwise) and ethnic dummies.
Household-level controls include: gender of household head (=1 for male, 0 otherwise), age of household head, number of household members, dummies for socioeconomic classes.
Community-level controls include: regional dummy (=1 if rural, 0 otherwise) and provincial dummies

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