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MEASURING MOTHER'S EMPOWERMENT THROUGH THE CULTURE OF SON'S PREFERENCE IN PAKISTAN

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Abstract

This paper highlights whether giving birth to a son plays a role in determining a 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 that leads to discrimination against daughters. In the presence of this culture of son preference, if women then give birth to a son or several sons, then it should help empower them. The results of the study show that having a son significantly helps in empowering mothers in Pakistan. In contrast, the son's birth order (higher or lower) is not an important factor in improving the mother's empowerment. Mother's empowerment is mainly driven by the number of sons, and the age of the son, and these results are more pronounced in rural areas of Pakistan, and for mothers belonging to poor households.

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 of women's empowerment, but literature does not provide sufficient evidence for explaining the relationship between a mother's empowerment and the gender

of her child, especially, in the presence of a 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 several 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 the mother's empowerment. The results of the study show that a son's birth order, higher or lower, does not seem to have an impact on a mother's empowerment. However, the number of sons without following any specific order significantly increases the empowerment of mother in a household. 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 can exert control over the decisions that she makes during 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 thinking, or her attitudes regarding life (Kishor, 2005). In developing countries, the status of women and hence, the extent of power that they can exert in 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 to a lower status in 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 consideration 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). The utility derived from having a son can be segregated into two types, namely, economic and social utility. The 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 of 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, the 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 the 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 toward total household earnings and agricultural production (Miller, 1987). In the presence of a 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 the loyalty of sons who will become future decision-makers in the household. Therefore, the presence of a son is an important determinant for improvement in a 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, that till parents reach their desired number of sons; they keep trying for additional children. Thus, causes girls present in large families to not only have access to fewer household resources but also have lower educational and nutritional attainment (Arnold, 1992; Friedman et al., 1994; Pande & Astone, 2007). According to Rukanuddin (1982), this relationship between fertility behavior and preference for a son also holds for Pakistan (Khan & Sirageldin, 1977). Many studies have highlighted the importance mothers'empowerment in regard to the well-being of their children especially their daughters. In order, to promote gender parity, the policy makers need to have knowledge regarding factors that may or may not have an impact on mother's empowerment. In this paper, we explore one such channel i.e., the impact of son's birth-order in contrast to the total number of sons born to a mother without following any specific order by using Pakistan Demographic and Health Survey (PDHS) (2012-13). To the best of our knowledge, this paper is the first of its kind in three ways: First, we develop a mother's empowerment index using a set of comprehensive questions that captures attitudinal as well as behavioral characteristic of the mother. We aggregate these questions to form two sophisticated indices for mother's empowerment using two methods; first, by using standard additive method and next by using Principal Component Analysis (PCA).

Second, we attempt to measure the impact of the presence of son both in terms of number and birth-order, by carefully controlling for all the important variables affecting the dependent variable to avoid the problem of omitted variable bias in the estimation strategy. Third, we explore heterogeneity in results by examining if there is substantial variation in the results based upon mother's age, location of the households and socioeconomic status of the households. As a result, this study aims to bridge the gap in literature by examining this relationship in greater detail for the context of Pakistan. The rest of the paper is as follows: The first section on introduction is followed by Section 2, that covers the literature review. Section 3 focuses on the data description, descriptive statistics, and the empirical specification used. Section 4 highlights the econometric results along with the robustness checks. The final section provides concluding remarks on policies that may help in uplifting women's status in Pakistan.

2. Literature Review

This section provides an in-depth review of the literature regarding the concept, determinants, and consequences of both the mother's empowerment along with preferences for son.

2.1. Measurement and Consequences of Mother's Empowerment

According to Jenson & Oster (2009), the concept of women's empowerment can be segregated into three broad dimensions, namely, behavioral, attitudinal, and exposure to domestic violence. Moreover, in literature, mother's empowerment is measured using two methods, one is the direct and the most preferred method while the other being a relatively an indirect method. One of the ways through which the mother's empowerment can be measured directly is by looking at her behavioral dimension or her ability to exert control over the household's decision-making process. These direct measures examine the extent of woman's involvement in intra-household decisions; by suggesting, if the woman decides alone, jointly with her partner or by having no say at all. 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 over husband's earnings, or observing employment for pay. (Zimmermann, 2018; Furuta & Salway, 2006; Li & Wu, 2011; Thomas, Contreras and Frakenberg,2002). The behavioral dimension relates to the extent to which the woman herself partakes in household decisions and is thus a reflection of the mother's extrinsic level of empowerment. The indirect method uses a measure of woman's well-being by analyzing their health, degree of domestic violence that is experienced, and lastly an individual's self-esteem. All of these outcomes are determined through measuring the total wage that is earned, the number of times the individual has become a victim to either physical or emotional violence, and by analyzing the body-mass index. The available data of such variables might be subjective, missing, prone to error or influenced

by access or nearness to health facilities along with any prevalence of a health policy measure within the country. Thus, a more precise and a less biased method of measuring mother's empowerment would be to use the direct method which is subject to less errors in comparison to the indirect method. (Lepine & Strobl, 2013; Imai *et al.,2014*; Mabsout & Staveren, 2010). The attitudinal dimensions relate to the woman's attitudes towards domestic violence which one can observe 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 & Oster, 2009; Arestoff & Diemai, 2016). This particular aspect deals with woman's intrinsic level of empowerment which is observed through whether she justifies the beating of the wife in the above-mentioned situations or not. If she does suggest that it is completely acceptable for her; then this is a reflection of a woman's lower self-esteem and causing her to acquire a lower status within the society leading to decreased empowerment. Furthermore, according to Afridi (2010), the dimension of woman's exposure to domestic violence is another way of measuring women's empowerment in which questions regarding if the husband has ever inflicted physical violence upon their wife are analyzed. These questions entail information regarding if the husband has ever; slapped, physically or has thrown something at his wife. Since, answers regarding these measures can entail biased responses as women may not want to reveal intrusive information regarding their personal lives; so very few papers have used this dimension. Additionally, mother's empowerment has also been studied in the context of prevailing divorce laws and male to female ratio in the society upon marriage. Having excess of males within the society can contribute to women having a higher bargaining position resulting from higher chances for them to remarry due to the lower numbers of females in the society. (Fafchamps *et al.,* 2009). The distorted sex ratios at marriage could be a result of preference for a son embedded in the fertility behavior of couples. (Arnold *et al.,* 1998; Lee, 2009). Literature suggests empowered mothers are more likely to positively impact their child's wellbeing outcomes. Duflo (2003) identifies that household decisions are clouded by individual preferences by examining the role of South-African old-age pension program on the child's anthropometric measures. Credit constrained households especially in the developing world seem to benefit the nutrition of children to a greater extent in the presence of cash transfers. Moreover, the gender of the recipient of the transfer, aids in shaping household's welfare. Transfers to women help in improving the health of children especially the girls more than that of boys. As in the developing world, the girls have inadequate access to health and education so these programs

can help with improving the status of young girls which will help in molding the future of developing countries. (Duflo, 2003; UNFPA, 2012; Millennium Development Report, 2014; Ahmed & McGillivary, 2015). Likewise, mother's empowerment can also have an impact on children's labor-force participation and educational attainment. (Basu, 2006; Emerson and Souza, 2007). For girls, the improvement in schooling outcomes is directly linked to mother's educational attainment in comparison to the father's level of education whereas the son's involvement in child labor decreases with improvement in father's level of education. (Emerson and Souza, 2007) Also, mother's education helps to improve the children's survival rate to a greater degree as compared to the father's level of education (Duraisamy and Duraisamy, 1995). Within the household, there is much more bias revolving around the education of girls as compared to boys thus highlighting the importance of enhancing the status of mothers in the household. (Ricardo-cano, 2001; Emerson & Souza, 2007). The finding of all the studies discussed above are in accordance with the existing literature which propose the failure of the unitary approach. Economic literature provides immense evidence regarding when mothers control the household resources the wellbeing of children in terms of health, education and child labor improves along with the health outcomes of other household members. (Duflo, 2003; Emerson & Souza, 2007; Björkman-Nyqvist, 2013). Since, mother's empowerment positively impacts child's health, education and labor which is directly linked to the development and accumulation of human capital for future generations. Thus, highlighting the importance of studying the determinants of mother's empowerment to not only secure the child's future but to further ensure the sustainable growth of the country (Duflo, 2003; Basu, 2006; Ricardo-Cano, 2001)

2.2. Culture of Son Preference

The concept of son preference is derived from the different values associated with a particular gender of the child. These preferences are highlighted by observing the fertility patterns of parents based on their preferences and parent's preferential treatment of their sons may leave their daughters unfulfilled in terms of education, nutrition and healthcare (Arnold, 1992; Pande and Astone, 2007). Many studies have identified the preference of son leading to larger household sizes, suggesting, till parents reach their desired quantity of sons; they keep trying for additional children. Thus, causes girls present in large families to not only have access to fewer household resources but to also have lower educational and nutritional attainment. According to Rukanuddin (1982) this relationship of fertility behavior and preference for son also holds for in the case of Pakistan (Khan & Sirageldin, 1977). Moreover, in terms of schooling, females drop out more from schools as compared to males because of the high opportunity cost attached to their time regarding household chores and providing care for younger

children at home. (Park, 1983; Arnold, & Roy, 1998; Garg & Morduch, 1998; Lu and Treiman, 2008; Lee, 2009). In Pakistan, in terms of school enrollment, parents like sending their sons to school thus giving rise to a gender-driven gap in regards to school enrollment (Aslam & Kingdon, 2008). A study conducted in India suggests, girls are discriminated against by their mothers in terms of breastfeeding. The mothers want to try for the next child as soon as possible after the daughter's birth, contributing to, shorter birth spacing which proves to be a source of female health disadvantage for both the mothers and the daughters. (Jayachandran and Kuziemko,2011). This particular study was replicated for the case of Pakistan and it was found that son preferences in Pakistan were twice in comparison to India; suggesting prevalence of stronger son preference in Pakistan. (Quintana-Domeque & Hafeez, 2016) According to Arnold, Kishor & Roy (2002) these preferences are further highlighted by looking at the differences in sex ratios at birth, a consequence of sex-selective abortions. If culture of son preference does exist, then the real question remains that why is it present in the first place? In the developing world, the norms regarding the preference for son are quite strong due to the considerations of the immense importance of males in the society. (Li & Wu, 2011; Zimmermann,2018). Countries present in the regions of Middle East, East Asia, North Africa and South Asia, suggest that precedence is given to sons over daughters due to many mechanisms that come into play (Mannan, 1988; Graham, Larsen & Xu, 1998; Pande & Astone, 2007). A link based upon parent's preferences for a particular gender in relation to the utilities associated, in terms of benefits and costs of having a specific gender is created. Ultimately giving preference to that gender that fares better in regards to the benefits than the costs. (Friedman et al., 1994). Utility derived from having a son can be segregated into two types, namely, the economic and the social utility. The economic utility suggests that sons act as a source of security during the 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 and Rossi, 2016). Moreover, in Pakistan there is a strong preference for sons because son's have a higher economic return in the market resulting in greater discrimination for girls in terms of schooling (Aslam & Kingdon, 2008). Additionally, sons seem to provide a great amount of help in terms of total household earnings and agricultural production. (Miller, 1987). 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, the 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 tend to enhance the son's utility

but also the kinship and the descent system tend to play an important role. Moreover, in these countries, where such practices prevail, the presence of a son enhances the strength and status of that family within the society (Dyson & Moore, 1983; Arnold, C & Roy, 1998; Brown, 2009)**.** Existing literature acknowledges social norms, household and individual characteristics as determinants of son preference. Starting off with the social norms regarding marriages, in exogamous marriages, the dowry payments are likely to be larger and all costs of marriage are made by the parents of the bride. Also, the girls who are married off are likely to be cut off with her family of origin. Thus, lowering the incentives of parents to make investments in girls in terms of education and career opportunities as the in-laws are likely to reap all the benefits of girl's education and employment. Moreover, where the market returns for boys is higher in terms of employment, there, more investment is directed towards sons as compared to daughters. For example, in rural areas where agricultural employment is prevalent, men in this regard are seen to have higher productivity whereas in the urban areas, males are given higher wages in comparison to females. Thus, the productivity and the wage difference enforce a greater degree of discrimination against girls in terms of investment (Rosenzweig & Schultz, 1982; Dyson & Moore, 1983; Pande & Astone, 2007; Brown, 2009; Barcellos *et al*., 2014). To summarize, literature highlights the preexisting notions regarding preferences for sons and the determinants and consequences of mother's empowerment. However, little research has been done in Pakistan which relates the gender of the children to mother's empowerment. Since son preference does seem to exist in Pakistan. We argue that both economic and social utility for son is higher than daughters especially for the case of Pakistan, therefore the society generally is anticipated as a male dominated society. Hence, we argue that in the context of Pakistan there is a need to test for the hypotheses that mothers tend to depend on their male offspring to uplift their status within the households. Furthermore, this paper will also test if son's birth-order plays any role that is different in comparison to the number of sons on mother's empowerment. This study in particular will provide evidence of this notion by modelling this relationship empirically.

3. Data and Methodology

3.1. Data

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 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 based on the 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%).

3.2. Descriptive Statistics

Table 1 provides statistics at the individual, household, and community levels. 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 educated as compared to their wives.

Table 1: Descriptive Statistics

Variables	**Mean**	**Standard Deviation**	**Observations**
Individual Level Characteristics			
Age (Years)	33.70	8.17	11,825
Female's Age	39.18	10.37	11,361
Husband's Age	20.75	4.03	11,825
Female's Age at First Birth	0.52	0.50	11,825
First-born's Gender (male=1)	0.29	0.45	11,825
Having a son regardless of birth order			
Years of Education			
Female's Education	3.71	4.98	11,825
Husband's Education	6.92	7.47	11,825
Current Employment Status (=1)			
Female's Current Employment Status	0.20	0.40	11,790
Husband's Current Employment Status	0.97	0.18	11,821
Frequency of Watching TV			
Watches TV Daily	0.46	0.50	11,819
Watches TV Once a Week	0.02	0.15	11,819
Watches TV Occasionally	0.20	0.40	11,819
Female's Marital Status			
Married (=1)	0.96	0.19	11,825

Widowed(=1)	0.03	0.17	11,825
Divorced/Separated(=1)	0.01	0.10	11,825
Household Level Characteristics			
Gender of Household Head(=1 if male)	0.91	0.28	11,825
Age of Household Head	46.56	13.21	11,825
Number of Household Members	8.86	5.00	11,825
Total Number of Children	3.78	2.22	11,825
Number of Sons	1.95	1.44	11.825
Socioeconomic Classes			
Richest	0.24	0.43	11,825
Richer	0.19	0.39	11,825
Middle	0.19	0.39	11,825
Poorer	0.19	0.39	11,825
Poorest	0.19	0.39	11,825
Community Level Characteristics			
Rural (=1)	0.53	0.50	11,825
Punjab (=1)	0.35	0.47	11,825
Sindh(=1)	0.22	0.41	11,825
KPK(=1)	0.20	0.40	11,825
Baluchistan(=1)	0.14	0.35	11,825
Gilgit Baltistan(=1)	**0.09**	**0.29**	**11,825**

Source: Author's own calculations.

At the household level, 91% of the households are led by males whereas the 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 while 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) 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 their husbands as compared to 2.84% of women in Gilgit Baltistan (See Figure 1(d)). Taking a glance at Figure 1, the province of Punjab has the highest percentage of women that partake in the household decisions whereas Gilgit Baltistan has the least number of women having a say in these decisions.

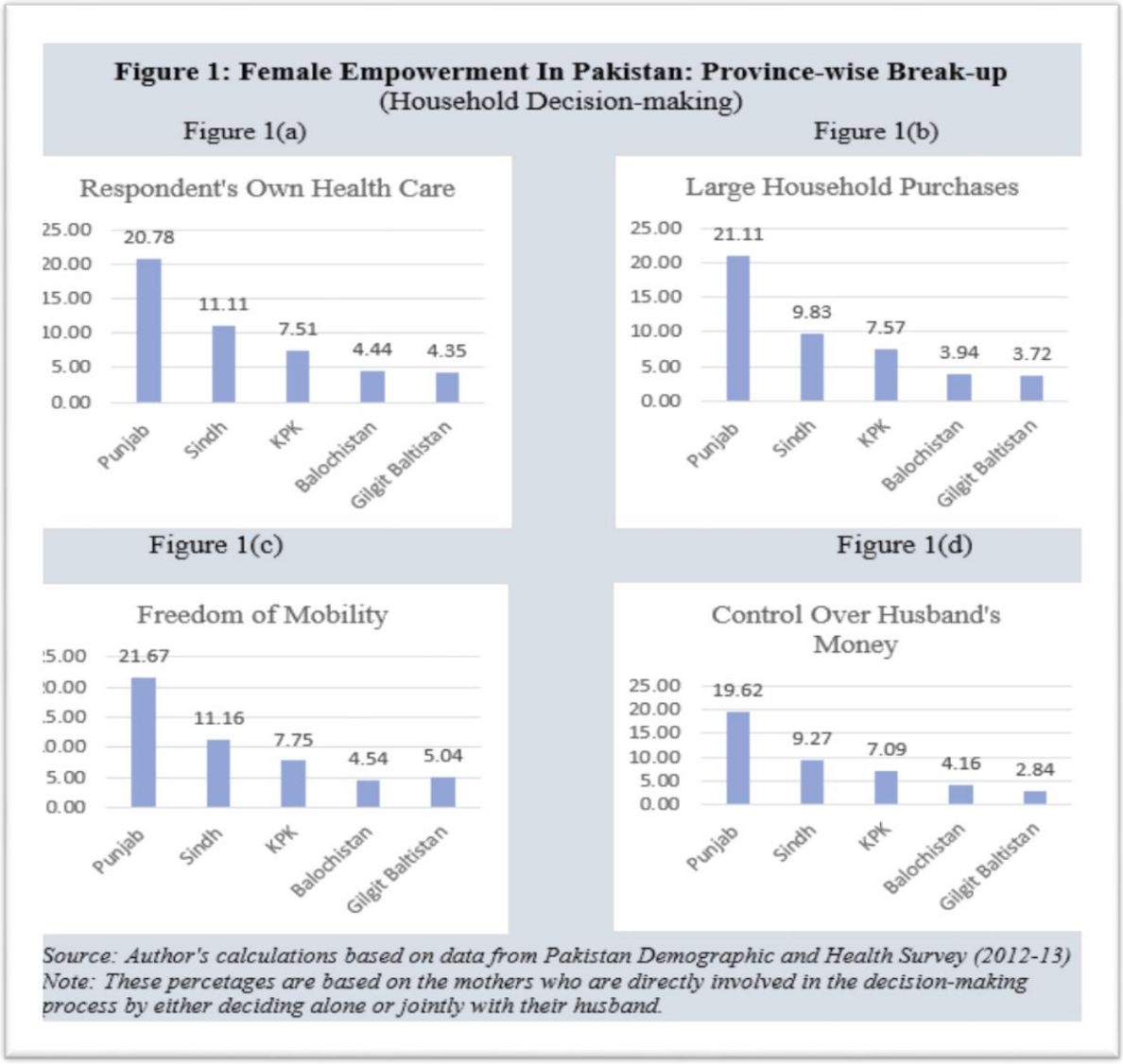

Figure 1: Female Empowerment in Pakistan: Province-wise break –Up (Household Decision-making)

Similarly, Figures 2(a), 2(b), 2(c), 2(d), 2(e), and 2(f) show that in terms of woman's attitudes toward 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 their wife if she does not take permission from her husband when going out whereas only 4.05% of women in Baluchistan do not agree with wife-beating in this scenario; suggesting women of Punjab be more empowered as compared to women of Baluchistan (See Figure 2(b)). These

numbers suggest that women in Punjab seem to be more empowered both in terms of the behavioral and attitudinal dimensions of women's empowerment in comparison to the remaining provinces of Pakistan.

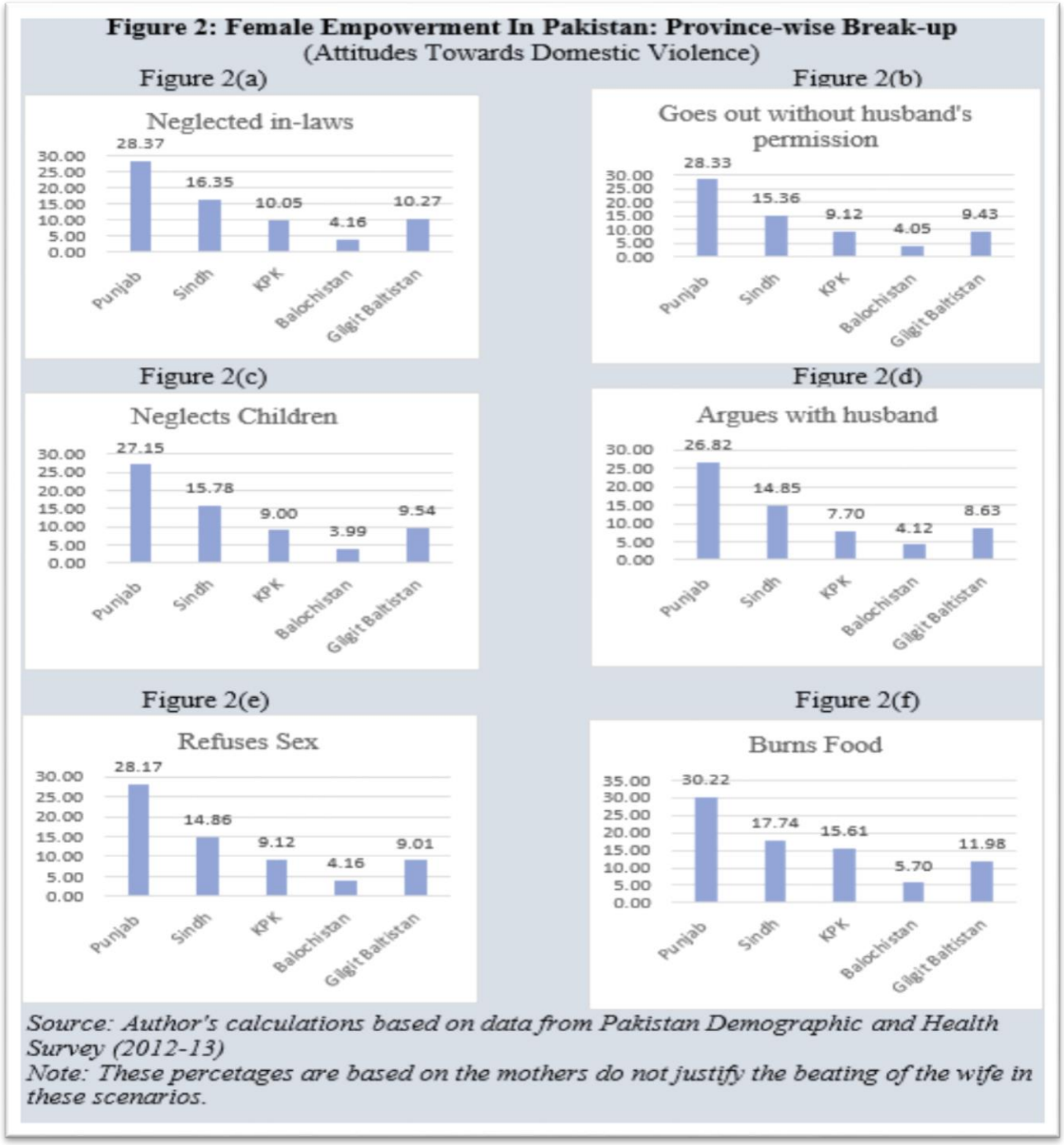

Figure 2: Female Empowerment In Pakistan: Province-wise Break –Up (Attitudes Towards Domestic Violence)

Furthermore, Figures 3(a), 3(b), 3(c) and 3(d) represent statistics for the 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 health if they have a first-born son as compared to those mothers who have a first-born daughter (23.93%) (See 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.

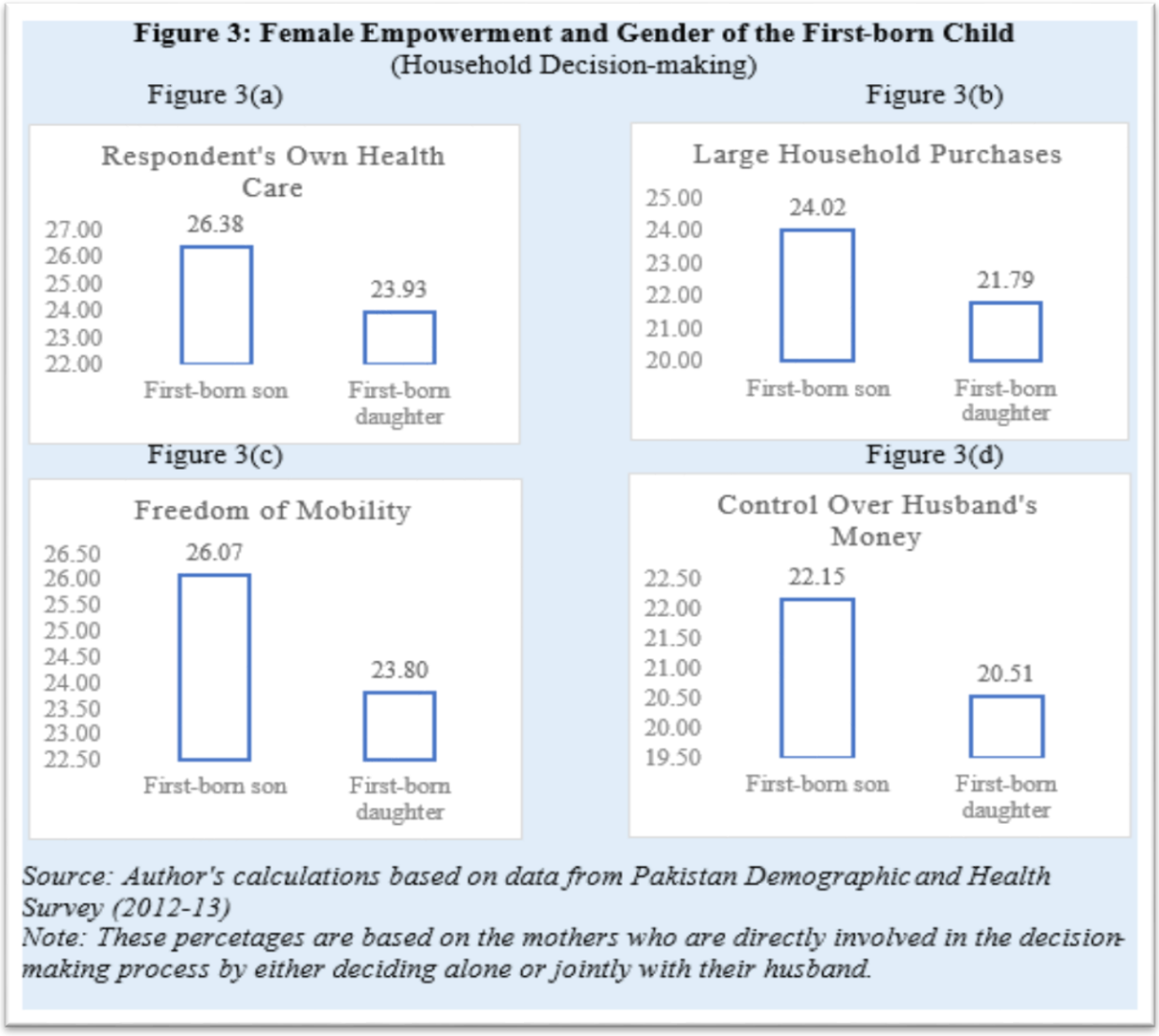

Figure 3: Female Empowerment and Gender of the First-born Child (Household Decision-making)

Additionally, Figures 4a, 4b, 4c, 4d, 4e, and 4f highlight the mother's attitudes toward domestic violence conditional on the first-born child's gender. 36.13% of mothers with a first-born son do not justify their 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 Figure 4(a)). With a mere glimpse at the statistics, one can see mothers with a first-born son are more empowered in terms of the behavioral and attitudinal dimensions as compared to mothers having a first-born daughter.

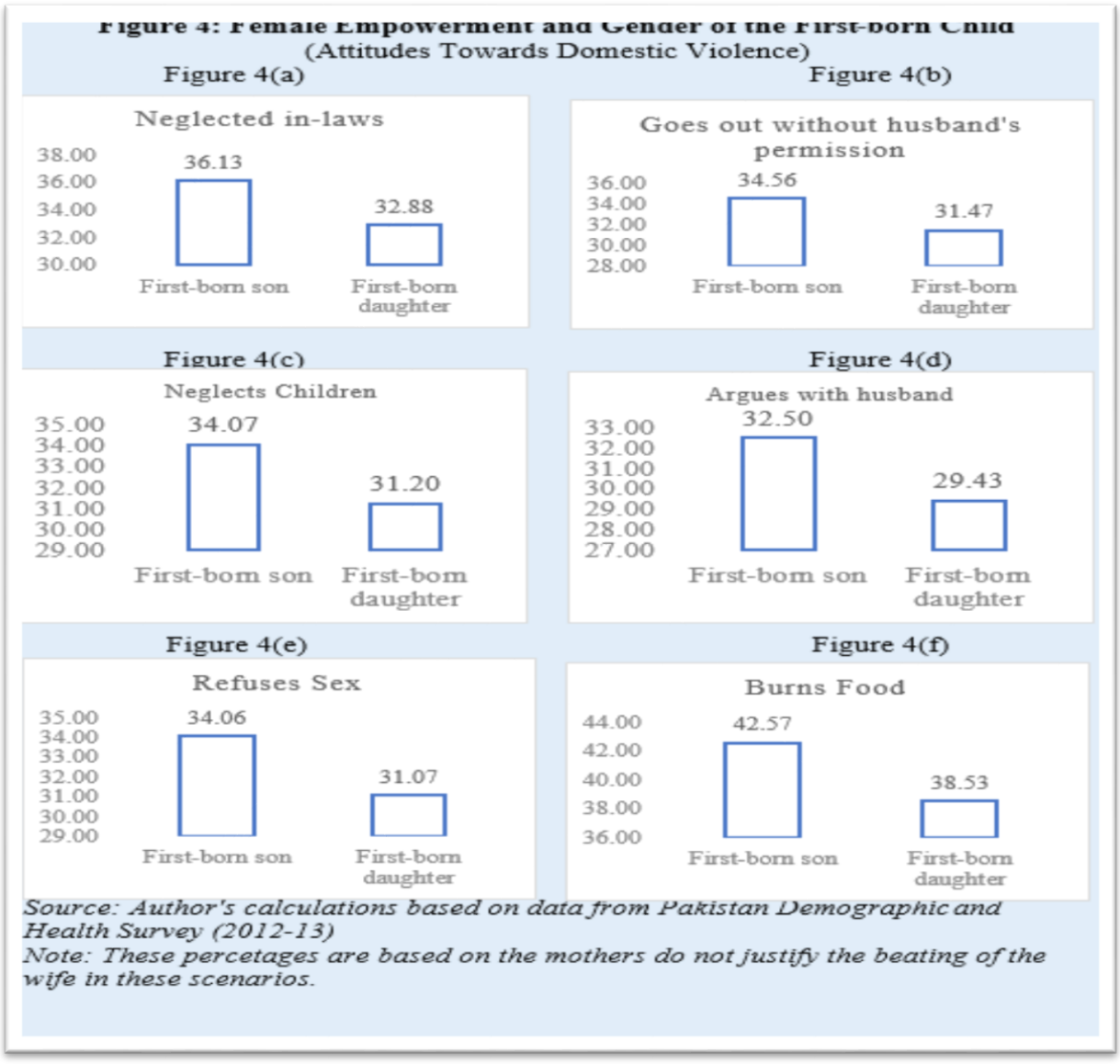

Figure 4: Female Empowerment and Gender of the First-born Child (Attitudes Towards Domestic Violence)

3.3. Control Variables

Literature sheds light on quite a few variables having an impact on mother's empowerment. We control for as many variables available in the data set and provide strong links of these variables with mother empowerment that has already been established in the literature as follows: Mother's characteristics as a wife has been argued to play

a vital role in determining her power in a household. Such as the wife's age and the relative difference between the ages of the spouses have also been said to play a role in determining mother's empowerment (Friedberg & Webb, 2006; Mabsout & Staveren, 2010). A woman is able to exert control in household decisions if her age is more than her husband's age. (Lundberg and Ward-Batts, 2000). Moreover, throughout the woman's life, age is important in determining her empowerment. As the woman's age increase, she is given more power in the fields of decision-making, freedom to move, and govern household resources (Mahmud, Shah & Becker 2012). Similarly, the income and occupation status of the mother also plays an important role in determining her power in a household. In particular, those women maintain more power in the household and who are given the right to manage and use their own independent earnings from working outside in comparison to the income earned from home-based work. Basu (2006) rightfully claims that to begin with, 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). The degree of specialization helps in determining the decision-making responsibility. A wife who specializes more in employment outside the home as compared to someone who specializes in home-based work will partake in the household decision making process to a lesser degree, contributing to contradictory evidence regarding a woman's work status and her empowerment. This suggests that only that spouse will gain power in the decision-making process that has relatively a greater amount of available time. (Anderson and Eswaran, 2009). Education can play a vital role in shape mother's empowerment. The more educated the wife is in comparison to her husband, the more she is able to partake in household decisions (Orrefice & Bercea, 2007) Educated women tend to be more exposed to jobs that entail some form of earnings as compared to uneducated women. Thus, causing women's empowerment and woman's educational attainment to share a positive and significant relationship. (Handa,1996). Geographical location of the mother also may play an important role in empowering women. Due to the presence of gender discrimination, in rural areas, men are given more importance as they are considered to be more agriculturally productive as compared to women. (Miller, 1987) Women belonging to rural areas tend to have lower educational attainment (due to decreased returns on their investment in education), lower chances of having paid employment, and poorer nutrition along with health as compared to women residing in urban areas, resulting in regional disparities (Aslam & Kingdon, 2008). Moreover, the motive of old-age support[1] seems to be more pronounced in rural areas, especially, in China's context, where parents residing in urban areas have greater

[1] Where parents in their old-age tend to depend more on their sons for support.

support from not only the government aided social safety nets but also from improved nutrition and better paying jobs in comparison to the rural counterpart. Thus, mother's empowerment within rural households is more likely to be impacted by the child's gender (Gupta *et al.*, 2003; Song & Burgard, 2008). Also, women who tend to have more control over reproductive matters especially in the quantity and the timing of children along with contraceptive use have greater relative power in comparison to their husbands. In regions with more gender equity, women tend to experience more autonomy. Women with more authority desire lesser children and a greater use of contraceptives (Kritz and Makinwa-Adebusoye, 1999). Lastly, according to Sathar and Kazi (2000), women in rural Pakistan partake more in the intra-household decisions if they live in a family structure belonging to a nuclear type. Woman's power is likely to decrease if the mother-in-law lives in the same household because she has a greater share of power than her daughter in-law. In a polygamous relationship, a woman experiences an increase in her position to manage her household where her husband may be given a status of a visitor rather than a full-time member of the household. (Goody, 1976). Based on the relevance of these variables discussed in literature, we try to control for as many variables as possible in our specification to avoid the problem of omitted variables, as discussed below:

3.4. Empirical Specification

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

$$Mother's\ Empowerment_i = \alpha_0 + \alpha_1 2^{nd}\ birthorder_i + \alpha_2 3^{rd}\ birthorder_i + \alpha_3 4^{th}\ birthorder\ or\ higher_i + \sum_{n=1}^{N} \boldsymbol{\beta_n X_n} + \mu_i \qquad (equation\ 1)$$

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. $\boldsymbol{X}_n$ are individual-level, household-level and community-level repressors. 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 a woman's healthcare, large

household purchases, visits to family or relatives, and control over the money that the husband earns (Zimmermann, 2018; Furuta and Salway, 2006; Li and Wu, 2011; Thomas, Contreras and Frakenberg,2002). Each decision-making variable is constructed in the form of the 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. To incorporate the mother's attitudes towards domestic violence, six questions have been taken into account and the responses to each of these questions help 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 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). The dependent variable is constructed using the additive methodology where all the binary variables related to decision-making and mothers' attitudes towards domestic violence are summed up. Thus, creating an additive index. This index caters to both mother's extrinsic[2] and intrinsic[3] levels of empowerment. A 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. Second, this paper estimates the impact of a number of sons regardless of their birth order on the mother's empowerment using the following equation:

$$Mother's\ Empowerment_i = \delta_0 + \delta_1 one\ son_i + \delta_2 two\ sons_i + \delta_3 three\ sons\ or\ more_i + \delta_4 one\ daughter_i + \delta_5 two\ daughters_i + \sum_{n=1}^{N} \boldsymbol{\beta_n X_n} + \mu_i \qquad (equation\ 2)$$

[2] 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)

[3] 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).

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. $\boldsymbol{X}_n$ 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.

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

4. Results

4.1. Mother's Empowerment and Son Preference

The results in the second column of Table 2, suggest 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.

Table 2: Impact of number of sons regardless of their birth-orders on mother's overall empowerment

Dependent Variable: ***Mother's Empowerment***	**(1)**	**(2)**
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

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 a child's gender is an important determinant of a mother's overall empowerment in Pakistan. 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. Next, we show the results based upon the birth-order of the son. We see that the 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 3, 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.

Table 3: Impact of son's birth-order on mother's overall empowerment

Dependent Variable: Mother's Empowerment	**(1)**	**(2)**	**(3)**
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

4.2. 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 Table 4 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 4: Impact of the Presence of Son on Mother's Empowerment, by mother's age

Mother's empowerment and number of sons		
Dependent Variable: ***Mother's Empowerment***	**Young Mothers (1)**	**Old Mothers (2)**
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)
Observations	4,403	6,302
Mother's empowerment and son's birth-order		
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)
Observations	4,403	6,302
Individual-Level Controls	Yes	Yes
Household-Level Controls	Yes	Yes
Community-Level Controls	Yes	Yes

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 imply that 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 4, 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. Next, we explore the relation between mother's empowerment and son's preference based upon rural/urban divide. 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 5 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 5: Impact of the Presence of Son on Mother's Empowerment, by rural/urban divide

	Mother's empowerment and number of sons	
Dependent Variable: ***Mother's Empowerment***	**Rural (1)**	**Urban (2)**
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)

Observations	5,666	5,045
Mother's empowerment and Son's Birth order		
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)
Observations	5,666	5,045
Individual-Level Controls	Yes	Yes
Household-Level Controls	Yes	Yes
Community-Level Controls	Yes	Yes

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 5 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. Results in Table 6 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 6: Impact of the Presence of Son on Mother's Empowerment, by Socioeconomic Status

Mother's empowerment and number of sons					
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)
Observations	2,635	2,143	2,036	2,044	1,969

Mother's empowerment and son's birth-order					
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)
Observations	2,635	2,143	2,036	2,044	1,969
Individual-Level Controls	Yes	Yes	Yes	Yes	Yes
Household-Level Controls	Yes	Yes	Yes	Yes	Yes
Community-Level Controls	Yes	Yes	Yes	Yes	Yes

Robust Standard errors in Parentheses clustered using Primary Sampling Unit (PSU)
*** p<0.01, ** p<0.05, * p<0.1
Community-level controls include: regional dummy (=1 if rural, 0 otherwise) and provincial dummies. 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.

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.

4.3. 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 7 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.

Table 7: Son preference in Pakistan

Variables	Desire for Additional Children(=1)	Desire for Additional Children(=1)	Total Number of Children	Total Number of Children
First-born son	-0.156***		-0.183***	
	(0.0282)		(0.0266)	
First-born daughter		0.153***		0.172***
		(0.0283)		(0.0266)
Individual-Level Controls	Yes	Yes	Yes	Yes
Household-Level Controls	Yes	Yes	Yes	Yes
Community-Level Controls	Yes	Yes	Yes	Yes
Observations	11,287	11,287	11,311	11,311
R-squared			0.630	0.630

Robust standard errors in parentheses clustered using Primary Sampling Unit (PSU)
*** p<0.01, ** p<0.05, * p<0.1

Third and fourth columns of Table 7, 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, but rather, are a result of the culture of son preference in Pakistan. This is because a 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 parents' 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 7 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.

4.4. 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. Table 8 represents results for the on mother's decision-making power, respectively. This table 10 shows the impact of number of sons and son's birth-order on individual aspects of mother's decision-making power. The results in the table 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 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.

Table 8: Measuring the Impact of the Presence of son on the Mother's Decision-Making Power

	Mother's Own Health Care	Large Household Purchases	Visiting Family Relatives	Control Over Husband's Money
	(1)	(2)	(3)	(4)
Impact of number of sons on mother's decision-making power				
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
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.

Next, in Table 9 we show the 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.

Table 9: Impact of Presence of Son on The Mother's Attitudes towards Domestic Violence

	Neglected In-laws (1)	Goes out without Husband's Permission (2)	Neglects Children (3)	Argues with husband (4)	Refuses Sex (5)	Burns food (6)
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)
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.

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. 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. The results suggest 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, 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, in Table 10 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.

Table 10: Attitudes Towards Domestic Violence constructed using a binary variable approach

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)
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

Finally, Table10 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 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 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 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[4]

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[4] 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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