

It Takes Two (To Make Things Right)
Women's Empowerment and Couple Concordance
in South Asia

Maurizio Bussolo

Nayantara Sarma

Anaise Williams



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Abstract

This paper empirically assesses the relevance of women's agency for family health and domestic violence outcomes in South Asia. It discerns three forms of agency by considering how decisions are taken within the household and highlights differences in the intensity of the correlation between these forms of agency and household members' well-being. Decision-making reports are matched by both spouses and classified as: (i) the wife participates in decisions, and both husband and wife agree about her role; (ii) the wife reports participating in decisions, but the husband does not recognize her role, that is, she takes power; and (iii) the husband reports that the wife participates in decisions, but the wife does not, that is, he gives power. Using

cross-sectional data from six South Asian countries, the paper finds that the association between all forms of women's agency and the health of their children is statistically significant and economically meaningful. In the cases of being underweight, used prenatal help, and modern use of contraception, and especially in the case of domestic violence, the spousal agreement variant of women's agency has stronger beneficial correlations vis-à-vis the taking power or giving power variants. The paper emphasizes the importance of spousal support and the contextual component of women's agency in South Asia, where social norms mediate women's decision making and outcomes.

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It Takes Two (To Make Things Right): Women's Empowerment and Couple Concordance in South Asia

Maurizio Bussolo, Nayantara Sarma, Anaise Williams

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1. Introduction

This paper provides a quantitative assessment of the links between women’s agency – or their capacity, condition, or state of acting or of exerting power – and households’ well-being captured by health outcomes. Differences in agency, in both private and public domains, between men and women hamper gender equality. In addition, women’s agency, or more generally their empowerment, has been linked with improvements in family planning, nutrition, health care utilization, child well-being, and productivity (Donald et al. 2016; Chang et al. 2020; Wong 2012).¹ This paper is focused on South Asia – a region where, despite rapid economic growth and development, there is strong evidence of persistent gender inequality. Across the region, men earn more than women, and women are largely under-represented in government and legislative systems (Unicef 2019). The Social Institutions Gender Index, which measures discrimination against women in social institutions globally, rates Bangladesh as very high, Pakistan, Nepal, India and Afghanistan as high, Sri Lanka as medium, and Bhutan as low (SIGI, 2019). Further, half of the women in Afghanistan, a quarter of the women in Bangladesh, and a fifth of the women in India and Pakistan have experienced intimate partner violence (IPV) in the past year (Unicef 2019). These gender gaps in terms of resources, agency and achievements – or, using Kabeer’s (1991) definition, these gaps in empowerment – are likely to explain some of the persistence of gender inequality in the region.

While not generating an explicit quantitative index of women’s agency, this study discerns forms of agency by considering how decisions are taken within the household. Husband and wife can take important household decisions jointly or individually, and they can acknowledge or deny the spouse’s role in the decision-making process. Three specific cases, categorized by Annan et al. (2021), are useful to infer the nature of women’s agency. In a first case, husband and wife both report that the wife participates in decisions, i.e. they *agree* on her decision-making role; in the second, the wife reports that she participates in decisions but the husband does not, i.e. she *takes* more decision-making power than the husband accords her; and in the third, the husband

¹ Empowerment is a broader concept defined by Kabeer (1991) as the process of expansion of freedom of choice and action in a context where this was previously denied. Resources, agency and achievement of well-being outcomes are the three elements of her empowerment framework.

reports that the wife participates in decisions but the wife reports she does not, i.e. the husband *gives* her a decision-making role she does not claim herself. The excluded category contains all residual reports in which she is accorded no role by either spouse.

Following the approach by Annan et al (2019), this paper first identifies which household's, wife's, and husband's characteristics, such as geographic location, or age, education, having a job, are related to each form of women's agency – the spousal agreement, the taking power, or the giving power form. Next, we explore whether these forms of agency exhibit similar correlations with the household's members health and other well-being outcomes.

The first contribution of this paper is to empirically examine the relevance of (different forms of) women's agency in South Asia. Using cross-sectional data from six South Asian countries, we find that the association between women's agency and the health of their children is statistically significant and economically meaningful. In a simple simulation where the share of households in which there is spousal agreement agency, i.e. where the wife's role in decision making is recognized by both spouses, were to increase from the current 42% to 100%, the implied improvements in health would be truly remarkable. They would be equivalent to almost one-third of a decade of progress in vaccination (5 percentage points improvement vis-à-vis a decade progress of 18 pp), and two-thirds of a decade-long reduction in stunting (6 pp reduction in stunting vis-à-vis a decade decline of 10 pp). This simulation assumes causality which we are not able to establish, but it is still useful to put the quantitative results in perspective.

The second contribution is to highlight that women's agency – even in the simple approach of proxying it with the description of the household decision-making process – is not a uniform condition or capacity. And, in contrast with Annan et al. (2021) who call attention to the process of wives taking power as a key indicator of women's agency, we emphasize the differences across forms of agency and the relevance of spousal agreement for the case of South Asia. Our shift of focus is motivated by substantial research pointing to the importance of environments that foster and support women's agency. Addressing interpersonal power relations is critical for women to be able to exert their agency, particularly in contexts with persistent patriarchal norms. Donald et al. (2016) indicate that studying the relationships between couple decision-making *concordance* and well-being outcomes is a main priority for future research. Acknowledging that

decision-making in certain spaces is mediated by power dynamics and gender norms is an important step towards understanding how to support women's agency. In line with other papers,² our results show that the associations between a number of important health outcomes and the spousal agreement variant of agency are stronger than in the variants of taking power or giving power agency. These results are particularly relevant in the context of South Asia where, according to the DHS samples, over half of the couples disagree on who within the household usually makes decisions.

The third contribution is an exploration of the links between women's decision-making participation – our proxy for women's agency – and intimate partner violence. These links have been understudied. Women's agency is in theory considered as a protection against domestic violence, but in part because of the difficulty in establishing causality, existing empirical studies have provided mixed results. In some cases, women's independent decisions have been linked to increased violence, in others the reverse is found. Even if we are not able to pin down causality, our findings highlight that the spousal agreement and taking power forms of women's agency are related to lower levels of domestic violence and that the magnitude of the correlation is larger for the first form of agency.

The paper is organized as follows. The next section presents a brief review of the relevant literature, sections 3 and 4 describe the data and methodology, and section 5 discusses the empirical results. Section 6 provides some concluding comments.

2. Literature

Our paper is related, and makes contributions, to at least three strands of the gender equality literature: a) descriptive studies focusing on correlates of women's empowerment and agency; b) the intra-household bargaining and resource allocation empirical studies and related quantitative methods to measure agency; and c) the contextual component of agency. The remainder of this section briefly discusses these three strands.

² Refer to Hameed et al. (2014) Uddin, et al. (2016), Story and Burgard (2012) and Ambler et al. (2019), also discussed in the following section.

Determinants of empowerment

A relatively rich research identifies and describes which socio-economic variables tend to have a strong association with women's empowerment and agency. This research shows that women who are older, have higher literacy, more children, and live in households of higher socioeconomic status are more likely to participate in household decisions (Hameed et al. 2014). A study in Indonesia found that women's bargaining power for decisions on use of prenatal care and delivery is highly influenced by a woman's access to economic resources. Further, social power influences whether decisions are made jointly rather than by the husband alone. Women who are from higher education or family status than their male spouse were more likely to experience couple joint decision-making (Beegle, Frankenberg, and Thomas 2001). As will be discussed in more detail below, the quality of a woman's relationship is also related to her participation in household decisions and her agency overall (Allendorf 2012). For example, a 2000 study in Bangladesh found that the extent to which women negotiated employment depends on the level of harmony in their relationships (Kabeer 2001).

Empirical methods to measure agency and the intra-household bargaining models

Empowerment is not a new concept but its systematic measurement by researchers and practitioners is relatively new (World Bank 2005). This recent shift is related to the idea that empowering the poor is crucial to reduce poverty – since no one has a greater stake in the fight against poverty than the poor themselves. A gold standard for measuring women's empowerment is not yet available. The methods to gauge women's agency, a key component of empowerment, have been largely inconsistent (Donald et al., 2016). Questions on household decision-making and resources allocations, such as the ones of the DHS surveys used in this paper, are increasingly added to household surveys. However, some issues remain on how to construct a women's agency indicator from these questions (Seymour and Peterman 2018). Ongoing work (Jayachandran et al, forthcoming) suggests constructing such an indicator by comparing different sets of these closed-ended decision-making questions to a closer-to-the-truth measure. This measure can be obtained from either in-depth open-ended qualitative interviews of both spouses or from lab experiments that aim at measuring empowerment via real

stakes experiments that involve interactions between husband and wife (see Almas et al 2018). The set of closed-ended questions that has the highest correlation with the 'true measure' will be used to build an indicator of agency. A key point is the interdependent choices of both husband and wife need to be examined to build a reliable women's agency indicator.

This research on the measurement of agency utilizing spousal interaction is clearly connected to the larger literature of intra-household bargaining. As described in the survey by Doss (2013), this literature initially expanded to overcome the limitations of the unitary model of the household which, while appealing in its tractability, has not held up to empirical tests (Thomas 1990; Alderman et al. 1995; Duflo and Udry 2004). The collective household model has some form of bargaining to resolve the conflict originating from the spouses' different perceptions and thus has become the preferred model. This model considers how the balance of power and independence between spouses impact the allocation of resources, household consumption and investments decisions.³

The (contextual or) environmental ability component of women's agency

Active goal setting with the self-perception of being in a role of decision-maker remain crucial components of agency. However, recent research on gender equity increasingly incorporates the decision-making environment in which women navigate (Donald et al. 2016). Household power imbalances are key elements influencing the *environmental ability* component of agency (Chang et al. 2020). Focusing on this component is useful because the environment can be more – or less – conducive to the achievement of women's agency. Further, a consensual form of agency may generate greater and more sustainable benefits for the household than antagonistic forms of agency. In addition, the strong role of family relations and their influence on women's agency

³ The literature on intra-household bargaining has produced numerous insights and includes tests of efficiency in household allocations (Udry 1996), empirical estimates of the determinants of resource allocation (Beegle, Frankenberg, and Thomas 2001), and experiments dealing with the process of intra-household decision-making (Ashraf 2009). In addition, this approach has also been used to inform estimates of intra-household inequality and of poverty at the individual (men, women and children) rather than at the household level. See, for example, the work of Dunbar, Lewbel, and Pendakur (2013) in Malawi, Calvi (2020) in India and Lacroix, Bargain, and Tiberti (2019) in Bangladesh.

have been emphasized in the specific case of South Asia. Recent literature has accumulated evidence supporting these ideas.

Firstly, collective household models – briefly described in the earlier subsection – have evolved from considering only women’s individual income and asset ownership as elements of their bargaining power to including social norms and contextual factors. An additional step has been to explicitly address the quality of couple communication as a channel to promote women’s agency. Allendorf (2012) found that women who report having better quality relationships with their spouses, did in fact have higher levels of agency – captured by higher decision-making roles and freedom of mobility. This demonstrates that women do not exert agency or choice in a vacuum: reaching goals is inherently a relational process involving negotiation, bargaining, even manipulation or consensus between partners. More generally, the literature on household decision-making has shifted from exclusively analyzing women’s participation in household decisions and their opinion about their own role (Uddin, Pulok, and Sabah 2016; Donald et al. 2016), to an approach which accounts for both spouses’ views about the decision process. Recent work and our paper speak to the value of matching husband and wife reports of decision-making to better predict women’s agency, household behavior, and well-being outcomes (Story and Burgard 2012; Donald et al. 2016; Becker, Fonseca-Becker, and Schenck-Yglesias 2006; Allendorf 2007).⁴

Secondly, the possibility that women’s agency achieved in a concordant environment, compared to other forms of agency, can be more beneficial for welfare outcomes has received strong support by research in the areas of family planning and domestic violence. In Bangladesh, Hameed et al. (2014) found that, controlling for economic status and other factors, couple joint decision-making was more predictive of contraceptive use than women-only decision-making. Another study in Bangladesh found that contraception need was more likely to be addressed when male and female partners agreed that the woman participate in household decisions (Uddin, Pulok, and Sabah 2016). Further, Story and Burgard (2012) found that couples who gave

⁴ Some argue that there are challenges in the approach of inferring women’s agency from couples’ reporting about the decision-making process. Ambler et al. (2019) explain that discrepancies in spouses’ responses can arise out of measurement error or asymmetric information. In the Bangladeshi context, the authors find higher disagreement about assets and decisions which are easier to hide, lending more support to the asymmetric information hypothesis.

discordant reports about who participates in decisions showed decreased utilization of maternal health services. Ambler et al. (2019) found that a number of women's well-being measures, including Body Mass Index (BMI), number of hours working, contraception use, and women's financial access, are better among women in partnerships with agreement on decision-making participation.

The link between women's agency and domestic violence has increasingly been explored. In many ways, domestic violence is a measure of relationship quality and this simultaneity makes pinning down causality in empirical analyses rather difficult. Despite this issue, several studies have explored the relationship between household decision-making participation and intimate partner violence. Using 2011 Uganda DHS data, Zegenhagen, Ranganathan, and Buller (2019) found that while women's report of decision-making participation did not predict IPV experience, men's report of women's decision-making participation did. In cases where male partners reported that their female partner does not participate in household decisions, IPV was significantly higher, as compared to male partners who reported that decisions were made by their female partner or jointly. According to Ebrahim and Atteraya (2019), in Ethiopia, women are less likely to report IPV experience if they report deciding alone or jointly on household decisions. Hindin and Adair (2002) found that couples where either the husband or wife dominated decisions led to higher levels of abuse in the Philippines, whereas joint decision-making was associated with less abuse. Some work suggests that violence can be a response to women's agency, but this phenomenon needs further research. Overall, couple decision-making reporting discordance and IPV experience have been less explored.

Finally, several studies have highlighted that the environmental ability component of women's agency is particularly salient in the South Asia region. Story and Burgard (2012) and Mumtaz and Salway (2009), among others, show that tight family relations across South Asia can restrict women's individual-level autonomy. Furuta and Salway (2006) argue that focusing on joint decision-making processes rather than on women's independent ones may be more appropriate in South Asia given the strong family sociocultural ties in this region. The anthropological literature speaks to the importance of examining how family structures affect women's agency.

It is important to recognize that household norms across cultures play a role in women’s ability and self-efficacy to exert agency (Allendorf 2012).

In sum, as argued by Chang et al. (2020), expanding the focus beyond women to male engagement through couple communication is increasingly seen as essential to supporting women’s agency and thus to the success of gender transformative programming.

3. Data and summary statistics

Measuring agency is not a simple exercise and we do not attempt it. This paper examines the different ways in which women exercise agency by participating in household decisions; and recognizing and being recognized for their role as decision-maker. The Demographic and Health Surveys (DHS) and, in the case of Bangladesh, the Integrated Health Survey (BIHS), are useful for this purpose because they contain a common set of questions pertaining to decision-making. Specifically, the surveys ask both spouses: “who within the family has final say on decisions about making large household purchases”. Responses, by both men and women, include a) respondent alone, b) respondent and spouse, c) spouse alone, d) someone else in the household, e) other. Using these responses and, in particular, the concordance or lack of it between the responses of both spouses, it is possible to assess the nature of women’s agency within the household.

The DHS are nationally representative household surveys on topics of population, health and gender relations typically conducted every five years. The surveys cover six countries in South Asia with separate modules for married men and women in the household. Data from the latest available year are used for each country, ranging from 2015 to 2018 (Table 1).

Table 1: Survey dates and countries

Country	Survey	Year	Number of couples
Afghanistan	DHS 7	2015	10,181
Bangladesh	BIHS	2015	3,145
India	DHS 7	2016	63,325
Maldives	DHS 7	2017	1,985
Nepal	DHS 7	2016	2,393
Pakistan	DHS 7	2018	3,279
Total			84,308

However, the DHS for Sri Lanka and Bangladesh do not contain a separate module for men so we are not able to incorporate Sri Lanka into our analysis and for Bangladesh, we use a survey similar in construct to the DHS – the Bangladesh BIHS which includes male and female modules.

The BIHS is a representative household survey of the country's *rural* areas developed by the International Food Policy Research Institute (IFPRI), funded by USAID. This paper draws on data from the second round of the BIHS survey in 2015. The BIHS includes information on household consumption, household member health, family planning, nutrition, and couples' decision making. Within the decision-making module, the male and female participants are both asked who normally takes the decision on "major household expenditures," with the option of reporting oneself, one's husband/wife, someone else, or joint decision-making. With such similarity to the DHS couple decision-making question, this variable was used to incorporate Bangladesh into the analysis.

Other DHS and BIHS surveys' outcomes and covariates relevant for an assessment of agency and its impact on welfare include individual and household characteristics such as age, education, work status, wealth, reproductive practices, children's health outcomes and domestic violence. Wealth from BIHS is the only measure that may be limited in terms of its equal comparison to the DHS; we use household savings as the measure for wealth in Bangladesh, whereas for the other countries we use the DHS wealth index on household assets.

Our final sample consists of married couples in South Asian countries in which the DHS is available, as well as in Bangladesh using the BIHS: Afghanistan (2015), Bangladesh (2015), India (2016), Maldives (2017), Nepal (2016), and Pakistan (2018).

3.1 Summary Statistics

Systematic differences in the level of development, as between rural and urban areas, or in age and education between spouses, can affect women's agency. Therefore, before our regression analysis, it is useful to provide some descriptive statistics on these and other relevant variables. Household characteristics are summarized in Table 2, while Table 3 refers to individual married women's characteristics.

The typical couple is rural with an age difference of 3-8 years between spouses. Across countries, one-third of the households are engaged in agriculture and access to electricity ranges from 60 to 100 percent. Husbands typically have 1 to 3 more years of education than wives, except for the Maldives and Bangladesh where the gap is much smaller. The female respondents are on average 30 years old; between 30 to 80 percent were married before reaching adulthood and have been married for more than 11 years.

Table 2: Summary statistics of household characteristics

	Afghanistan	Bangladesh	India	Maldives	Nepal	Pakistan	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(8)
H-W edu difference (years)	2.75 (4.74)	0.00 (3.49)	1.43 (4.27)	-0.31 (3.31)	2.08 (3.84)	1.86 (4.71)	1.53 (4.33)
H-W age difference (years)	4.22 (3.91)	8.28 (4.66)	4.95 (3.52)	3.30 (3.89)	3.60 (4.02)	4.20 (4.72)	4.88 (3.77)
Husband works in agriculture	0.32 (0.47)	0.10 (0.31)	0.35 (0.48)	0.09 (0.28)	0.32 (0.47)	0.21 (0.41)	0.33 (0.47)
Rural	0.81 (0.39)	1.00 (0.00)	0.65 (0.48)	0.59 (0.49)	0.38 (0.48)	0.60 (0.49)	0.67 (0.47)
Distance to water (1-5 scale)	1.88 (1.06)	1.17 (0.45)	1.47 (0.76)	1.02 (0.18)	1.35 (0.65)	1.48 (0.91)	1.49 (0.81)
Electricity	0.71 (0.46)	0.64 (0.48)	0.90 (0.29)	1.00 (0.02)	0.91 (0.28)	0.92 (0.27)	0.87 (0.33)
Observations	10,181	3,145	63,325	1,985	2,393	2,797	83,826

Covariates limited to cross-country availability; Data weighted with individual women sample weights

Table 3 highlights that women’s education and employment rates vary widely across countries. In Afghanistan, currently married women have on average only 1 year of education, while it reaches almost 10 years in the Maldives. Employment ranges between 12 percent in Afghanistan to 60 percent in the Maldives.

	Afghanistan	Bangladesh	India	Maldives	Nepal	Pakistan	Total
	Mean/SD						
	(1)	(2)	(3)	(4)	(5)	(6)	(8)
Age (years)	29.8 (7.91)	38.59 (11.38)	32.78 (8.09)	32.3 (6.79)	31.51 (8.12)	30.77 (7.58)	32.52 (8.32)
Education (years)	1.21 (3.15)	3.78 (3.63)	6.19 (5.20)	9.78 (3.33)	4.42 (4.31)	4.61 (5.15)	5.47 (5.20)
BMI	. (.)	22.07 (3.88)	22.55 (4.53)	26.39 (5.30)	22.73 (4.18)	25.38 (5.71)	22.76 (4.65)
Currently working	0.12 (0.32)	0.32 (0.47)	0.26 (0.44)	0.45 (0.50)	0.6 (0.49)	0.15 (0.36)	0.25 (0.43)
Works outside home	0.06 (0.24)	0.08 (0.28)	0.06 (0.24)	0.43 (0.50)	0.22 (0.41)	0.12 (0.33)	0.08 (0.27)
Married before age 18	0.5 (0.50)	0.64 (0.48)	0.43 (0.50)	0.11 (0.32)	0.55 (0.50)	0.32 (0.47)	0.44 (0.50)
Years married	11.82 (7.82)	21.86 (12.00)	14.39 (8.76)	11.37 (7.50)	13.74 (8.54)	11.12 (7.63)	14.16 (8.92)
Observations	10,181	3,145	63,325	1,985	2,393	2,797	83,826

Covariates limited to cross-country availability

Data weighted with individual woman sample weights

Table 4 contains the various combinations of the answers to the question “who has the last say on large household’ purchases”. The columns of the table represent the possible answers given by the wife, while the rows are the same possible answers for the husband. Cells along the main diagonal represent situations in which both wife and husband chose the same answer, i.e. there is agreement within the couple. Cells off the main diagonal represent disagreement.

The table also classifies the joint responses so that they reflect different ways in which the woman exerts agency in the household. A cell is labeled as ‘W Takes Power’ if the wife grants herself a larger decision-making role than her husband does. This includes all cases where she says she makes decisions alone while her husband does not, and cases where she says they are made jointly but her husband says they are either made by him alone or others within the household and outside. Conversely, cells are labeled as ‘H gives power’ in those cases in which the husband reports the wife having a greater decision-making role than she herself does. The third category includes cases where both spouses agree that the wife has some role in decision-

making, whether it is joint or her alone; and these cases are labeled ‘Agree W Has Power’. All the cases where the wife is not accorded any role are categorized as the base or reference category and label that with a ‘0’.

Table 4: Classification of decision-making scenarios

Husband's response	Wife's response				
	Wife alone	Husband alone	Joint	Someone else	Other
Wife alone	Agree W Has Power	H Gives Power	H Gives Power	H Gives Power	H Gives Power
Husband alone	W Takes Power	0	W Takes Power	0	0
Joint	W Takes Power	H Gives Power	Agree W Has Power	H Gives Power	H Gives Power
Someone else	W Takes Power	0	W Takes Power	0	0
Other	W Takes Power	0	W Takes Power	0	0

Each of the cells of Table 4 can be populated using the relevant share of the married couples interviewed in the DHS and BIHS surveys, and the result is shown in Table 5.

Reading off the row and column totals of Table 5, we find that the most common response for wives (61.3 percent) and husbands (59.9 percent) is that decision making is joint. However, only 40.3 percent of couples are in *agreement* that decision making is joint, and this is the largest group of couples who ‘agree that the woman has decision power’. This group represents a much higher share than that found in Africa, where only 26.4 percent of couples agreed that decisions were joint (Annan et al., 2019). And this contrasts with the fact that overall agreement, the sum of the percentages along the main diagonal, is about half of the couples in both South Asia (53.4 percent) and Africa (52.5 percent).

The next most frequent combination of responses, at 15.1 percent of all the interviewed couples, is for wives to report that decisions are made jointly but their husbands to report that they alone make them; this combination is one where the ‘woman takes power’. This is followed by its symmetrical opposite, comprising 13 percent, where the ‘husband gives power’ by reporting that decisions are joint whereas the wife says that the husband alone makes them.

Expectedly, in all countries except the Maldives, it is significantly more common for husbands to report that they make decisions alone than wives to report that they make decisions alone, and for wives to report that their spouse makes decisions alone than husbands to report that their spouse makes decisions alone (Appendix Table 2).⁵

Husband's response	Wife's response				Total
	wife alone	husband alone	joint	others	
wife alone	1.4	1.6	4.7	0.3	8.0
husband alone	1.5	9.9	15.2	1.6	28.3
joint	3.9	13.0	40.3	2.7	59.9
others	0.1	0.9	1.1	1.8	3.8
Total	6.9	25.4	61.3	6.4	100.0

Source: DHS Version 7 population weights applied (Afghanistan, India, Maldives, Nepal, Pakistan) and BIHS 2015 (Bangladesh)

To further highlight differences across countries, the shares of Table 5 for the differently labeled cells – taking power, giving power, and agreeing on the decision role of the woman – are aggregated and presented in Table 6. In fact, the first two rows in Table 6 illustrate responses given by women, no matter what answers their husbands gave. Nepal and the Maldives have the highest share of women reporting to make decisions alone at 26 and 23 percent. This correlates positively with their better performance in the region on other gender equality indicators, such as employment. More than 70 percent of women in India, Bangladesh and Maldives report that decision making is joint. However, this is not the case in Afghanistan and Pakistan where only 41-43 percent of women do so. In Nepal, the share is only 47 percent, but this is offset by a larger share of women reporting to make decisions alone which is not the case in Pakistan and Afghanistan.

⁵ The same pattern holds for decisions related to respondents' own health care (Appendix Table 2). A significantly smaller share of women report making their own health care decisions alone, while men do so often. Women reporting joint decisions is much more common than men reporting joint decisions.

Table 6: Decision making by country							
	Afghanistan	Bangladesh	India	Maldives	Nepal	Pakistan	Total
	Mean/SD						
Indicator variables	(1)	(2)	(3)	(4)	(5)	(6)	(8)
W reports she decides alone	1% (0.12)	7% (0.25)	7% (0.25)	23% (0.42)	26% (0.44)	3% (0.17)	7% (0.25)
W reports decisions are joint	41% (0.49)	74% (0.44)	74% (0.44)	87% (0.33)	48% (0.50)	43% (0.50)	68% (0.47)
W- Takes Power	23% (0.42)	26% (0.44)	22% (0.41)	19% (0.39)	21% (0.41)	20% (0.40)	22% (0.41)
H- Gives Power	15% (0.36)	15% (0.36)	23% (0.42)	42% (0.49)	22% (0.41)	22% (0.42)	22% (0.42)
HW-Agree that W has role	17% (0.38)	47% (0.50)	47% (0.50)	37% (0.48)	20% (0.40)	23% (0.42)	42% (0.49)
Observations	10181	3145	63325	1985	2393	2797	83826

Data weighted with individual women sample weights

The last three rows consider responses given by *both* spouses according to the classifications of Table 4. The share of women ‘taking power’ is roughly 20 percent in all the countries in our sample but there is more between-country variation for the other two categories. The incidence of the husband ‘giving power’ ranges from 15 percent in Afghanistan and Bangladesh to 42 percent in the Maldives. Both spouses agreeing that the wife has some role is the most common joint response in India and Bangladesh (47 percent) but rare in Afghanistan (17 percent).

4. Methodology

Our empirical approach to link women’s agency to welfare outcomes follows that of Annan et al. (2021). As in their paper, we first assess correlations between women’s decision-making roles and other empowerment proxies. These proxies, such as education and electricity-use are *resources* that facilitate women’s agency as outlined by Kabeer’s (1999) definition. These may be tangible (e.g. assets, access to water) or intangible (e.g. own and husband’s education). We estimate the following logistic specification to account for binary dependent variables:

$$Y_{ic} = \alpha + \beta X_{ic1} + \gamma X_{ic2} + \mu_c + \varepsilon_{ic} \quad (1)$$

where Y_{ic} indicates the wife i ’s role in household decision-making in country c as reported by her alone and matched to her spouse’s response according to Table 6. X_{ic1} contains the wife’s

characteristics that might act as a resource for empowerment such as work status, education and age differences with the spouse. The vector X_{ic2} includes spouse and household characteristics such as engagement in agriculture, rural residence, access to electricity and water and wealth. Country fixed effects are captured by μ_c and ε_{ic} is the idiosyncratic error term.

While the above estimation allows us to identify some predictors or drivers of the different forms of agency, in Equation 2 we examine the association between the nature of women's decision making roles and household welfare outcomes. Namely, we look at the relative importance of the wife taking power, the husband giving power, and both spouses agreeing that the wife has some role in decision making with reference to the base category of her having no role. We estimate the following specification using a logistic model:

$$W_{ic} = \alpha + \beta Wtakespower_{ic} + \gamma Hgivespower_{ic} + \delta HWagrees_{ic} + \lambda X_{ic} + \mu_c + \varepsilon_{ic} \quad (2)$$

Where W_{ic} refers to welfare outcomes such as children's health, wife's general and reproductive health, and self-reported incidence of domestic violence for wife i in country c . The right-hand side variables, $Wtakespower_{ic}$, $Hgivespower_{ic}$ and $HWagrees_{ic}$ are the matched spouse responses as outlined in Table 4. The vector of covariates, X_{ic} , includes women's empowerment proxies, household and spouse characteristics and μ_c captures country fixed effects. As before, ε_{ic} is the pure error term.

5. Results

Correlations of decision-making with empowerment proxies

We find that women's decision-making and agency in claiming their own roles are positively correlated with other standard empowerment indicators. In South Asia, working women are 2.5 percentage points more likely to report that they make decisions alone than women who do not work (Table 7, Column 1). On average for each 100 women, only 6.9 of them report that they decide alone, so these additional 2.5 percentage points for working women are a meaningful increase. Being older, married for longer, having smaller education differences with their spouses

and higher wealth are all positively and significantly associated with women reporting that they take decisions alone.

	W reports alone decide	W reports alone or joint decide	Takes power	Gives power	HW-Agree that W has role
	Marginal Effects (SE)				
	(1)	(2)	(3)	(4)	(5)
Age younger than 19 yrs.	-0.026*** (0.008)	-0.114*** (0.011)	-0.020 (0.011)	0.031** (0.010)	-0.117*** (0.013)
Age between 20-34 yrs.	-0.003 (0.003)	-0.022*** (0.005)	0.002 (0.005)	0.005 (0.005)	-0.020*** (0.006)
W years schooling	-0.000 (0.000)	0.009*** (0.000)	-0.002*** (0.000)	-0.003*** (0.000)	0.010*** (0.000)
W works	0.024*** (0.002)	0.049*** (0.004)	0.022*** (0.004)	-0.023*** (0.004)	0.016*** (0.004)
W works outside	0.008** (0.003)	0.007 (0.006)	-0.003 (0.006)	0.007 (0.006)	0.012 (0.007)
W married < age 18 yrs.	-0.000 (0.002)	-0.003 (0.004)	-0.001 (0.003)	0.003 (0.003)	-0.000 (0.004)
Years married	0.001*** (0.000)	0.005*** (0.000)	0.002*** (0.000)	-0.002*** (0.000)	0.003*** (0.000)
H-W edu difference	-0.002*** (0.000)	-0.001*** (0.000)	-0.002*** (0.000)	0.001** (0.000)	0.002*** (0.000)
H-W age difference	0.000 (0.000)	0.001 (0.000)	-0.001 (0.000)	0.001** (0.000)	0.000 (0.000)
H works in agriculture	-0.008*** (0.002)	-0.023*** (0.004)	0.010** (0.003)	0.008* (0.003)	-0.033*** (0.004)
Rural residence	-0.012*** (0.002)	-0.032*** (0.004)	-0.013*** (0.004)	0.007 (0.004)	-0.012** (0.004)
Distance to water	-0.003** (0.001)	0.012*** (0.002)	0.007*** (0.002)	-0.007*** (0.002)	0.007** (0.002)
Household electricity	0.005 (0.003)	0.029*** (0.005)	0.018*** (0.005)	-0.006 (0.005)	0.012* (0.006)
Poorest 20%	-0.005 (0.004)	0.035*** (0.007)	0.008 (0.006)	-0.014* (0.006)	0.031*** (0.007)
Poorer 20% - 40%	0.007* (0.003)	0.026*** (0.006)	0.005 (0.006)	-0.011* (0.006)	0.020** (0.006)
Middle 40%-60%	0.013*** (0.003)	0.020*** (0.006)	0.016** (0.005)	-0.005 (0.005)	-0.000 (0.006)
Richer 60%-80%	0.014*** (0.003)	0.005 (0.005)	0.012* (0.005)	0.005 (0.005)	-0.012* (0.006)

Dependent variable mean	0.069	0.682	0.218	0.223	0.417
Number of obs	84,308	84,308	84,308	84,308	84,308
R-squared	0.074	0.081	0.004	0.013	0.057

Robust logistic regression reporting marginal effects, adjusting for country fixed effects; p-value < 0.05

p-value < 0.01 *p-value < 0.001

The direction and significance of these ‘proxies’ or correlates of empowerment remain when the dependent variable is expanded to include joint decision making (Column 2) or women taking power (Column 3), even if their economic relevance vary. Women having a husband engaged in agriculture and living in a rural household are less likely to report that they take decisions alone or jointly (Columns 1 and 2). However, working women are less likely to be *given power* by their husbands and a large difference in ages and education level between spouses *increases* the probability of a husband giving power (Column 4). This highlights the role of the husband’s characteristics, especially education, in mediating or facilitating women’s agency and empowerment.

Forms of decision-making power

In Table 8, we explore the association between the same empowerment proxies and the *directionality* or form of the agency outcomes. To do so we restrict the sample to groups of couples who have provided specific contrasting answers. So for example, to highlight the sign and strength of the correlations of empowerment proxies for couples with wives taking power, we contrast this group against the subset of couples where the wife has no power (the ‘0’ category in table 4), rather than against all the other couples. This is done in Column 1 of Table 8 where the dependent variable is an indicator equal to 1 if the wife takes power and 0 if she has no decision-making role accorded by herself or her spouse. In Columns 2 and 3 we compare spousal agreement (dependent variable = 1) with the base categories of no power at all and husband giving power, respectively. We find that women who have no agency are typically younger women, less educated women, unemployed women and women who are married fewer years as compared to women who agree with their spouses (column 2). As compared to women who agree, women who receive power from their husband are more likely to be younger, rural, and in a relationship with a large age gap (column 3).

In columns 4 and 5, the wife taking power (dependent variable = 1) group is contrasted with base categories of both spouses agreeing that the wife has some role and husband giving power (dependent variable = 0), respectively. Across all three specifications, a working woman has significantly higher probability of taking power while greater differences in education between the spouses significantly reduces the probability of the wife taking power. While age is not a significant correlate when comparing women who take power to those who are not accorded any (Column 1), it is surprising that younger women below age 19 years are up to 5.8 percentage points more likely to take power when the reference category is both spouses agreeing on her role.

Table 8: Directions of decision-making power - reporting marginal effects

	Wife takes power vs. wife does not have power at all	Husband and wife agree vs. wife does not have power at all	Husband and wife agree vs. husband gives power	Wife takes power vs. Husband and Wife agree that W has role	Wife takes power vs. husband gives power
	Marginal Effects (SE)				
	(1)	(2)	(3)	(4)	(5)
Younger than 19 yrs.	-0.116*** (0.018)	-0.104*** (0.012)	-0.105*** (0.015)	0.058*** (0.016)	-0.058*** (0.019)
Age between 20-34 yrs.	-0.025*** (0.009)	-0.024*** (0.006)	-0.014** (0.007)	0.013** (0.007)	-0.003 (0.009)
W years schooling	0.008*** (0.001)	0.010*** (0.000)	0.008*** (0.001)	-0.007*** (0.001)	0.002* (0.001)
W works	0.052*** (0.007)	0.027*** (0.005)	0.032*** (0.005)	0.015*** (0.005)	0.052*** (0.007)
W works outside	0.025** (0.010)	0.027*** (0.007)	0.001 (0.008)	-0.011 (0.008)	-0.010 (0.010)
W married < age 18 yrs.	0.002 (0.006)	-0.002 (0.004)	-0.003 (0.005)	-0.002 (0.005)	-0.004 (0.006)
Years married	0.005*** (0.001)	0.004*** (0.000)	0.004*** (0.000)	0.000 (0.000)	0.004*** (0.001)
H-W edu difference	-0.002** (0.001)	0.000 (0.000)	-0.001 (0.001)	-0.003*** (0.001)	-0.004*** (0.001)
H-W age difference	0.001 (0.001)	0.001** (0.000)	-0.001 (0.001)	-0.001 (0.001)	-0.002*** (0.001)
H works in agriculture	-0.023*** (0.006)	-0.031*** (0.004)	-0.025*** (0.005)	0.030*** (0.005)	0.003 (0.006)
Rural residence	-0.043*** (0.007)	-0.026*** (0.005)	-0.014*** (0.005)	-0.007 (0.005)	-0.022*** (0.007)
Distance to water	0.016***	0.010***	0.012***	0.001	0.015***

	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)
Household electricity	0.038***	0.023***	0.017**	0.002	0.027***
	(0.008)	(0.005)	(0.007)	(0.007)	(0.009)
Poorest 20%	0.048***	0.031***	0.032***	-0.018**	0.024**
	(0.011)	(0.007)	(0.009)	(0.009)	(0.011)
Poorer 20% - 40%	0.027***	0.023***	0.023***	-0.008	0.018*
	(0.010)	(0.007)	(0.008)	(0.008)	(0.010)
Middle 40%-60%	0.036***	0.013***	0.006	0.013*	0.025***
	(0.009)	(0.006)	(0.007)	(0.007)	(0.009)
Richer 60%-80%	0.022**	0.006	-0.012*	0.017**	0.008
	(0.009)	(0.006)	(0.007)	(0.007)	(0.009)
Dependent variable					
mean	0.606	0.746	0.652	0.344	0.495
Number of obsv	30,324	48,082	53,984	54,250	36,226
R-squared	0.1263	0.2363	0.028	0.035	0.017

Robust logistic regression reporting marginal effects, adjusting for country fixed effects; p-value < 0.05 **p-value < 0.01 ***p-value < 0.001

Up to this point, we have detected the sign and assessed the strength of the correlation of empowerment proxies to different forms of women's agency within the household. Expectedly, some empowerment variables, such as having a job, have strong positive correlations with 'women taking power' and 'husband and wife agreeing on the women decision role' relative to other categories and conversely, the gap in education in favor of the husband, tend to be correlated negatively with taking power. Different signs on the coefficients across these results suggest that women's agency is not a uniform condition or capacity. The implications of each variant for the household welfare warrant examination.

Health outcomes

Women's agency has been found to be positively associated with better health outcomes for themselves and children in the household. Here, we explore whether women taking power, husbands giving power, or couple agreement on the wife's decision-making role are significantly, and with different intensity, correlated with improved anthropometric measures, reproductive and maternal health outcomes for women, and vaccination of children. The marginal effects of these decision-making indicators are interpreted with reference to the omitted category of women being accorded no role by herself or her husband. As in the previous tables, the outcomes are all binary and so we use robust logistic regressions to measure these relationships.

In Table 9 we find that all reproductive and maternal health outcomes are significantly correlated with both women taking power and couple agreement, except for unmet family planning need. Women taking power and couple agreement act in the same direction across outcomes; they are associated with lower probabilities of being underweight (Column 1) and higher probabilities of having terminated a pregnancy (Column 2), using prenatal help (Column 3), using assistance during delivery (Column 4), having at least the recommended number of antenatal visits (Column 5), and of both the wife and husband reporting modern contraceptive use (Columns 7, 8). For some of these health outcomes, the differential vis-à-vis couples where the woman has no decision role are not only statistically significant, but also socio-economically relevant. For example, the probability of reporting use of modern contraception is 2.3 and 2.7 percentage points, respectively for wife and husband, higher among couples who agree that either the woman decides or that the spouses jointly decide than among couples who do not accord the wife any decision-making role. For couples where the woman takes power that same differential is 1.2 percentage points for both wife and husband. This is a large increase if compared to the unconditional probability of using modern contraceptives, which is 46% for women and 21% for men.

The more passive agency form, in which the husband gives power, has still some positive correlations with health outcomes, but the results of Table 9 show clearly that not all agency types have the same correlation intensities. As illustrated in the bottom three rows of Table 9, for the cases of being underweight, used prenatal help, and modern use of contraception, the taking power or spousal agreement types of agency have stronger (and beneficial) correlations versus the situation in which the woman has been given power. And even between the taking power and spousal agreement types the correlations are similar but not identical. For three outcomes, used prenatal help, wife uses modern contraceptives, and husband uses modern contraceptives, the correlations with the spousal agreement type of agency are much larger than those with the women takes power type.

Table 9: Family planning and reproductive outcomes

	BMI: underweight	Ever terminated pregnancy	Used prenatal help	Ever used assistance during delivery	More than 8 antenatal visits	Unmet family planning need	Wife uses modern contraceptive	Husband reports use of modern contraceptive
	Marginal Effects (SE)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
W takes power [A]	-0.020*** (0.005)	0.009* (0.005)	0.035*** (0.006)	0.028*** (0.006)	0.011*** (0.003)	0.005 (0.004)	0.012* (0.006)	0.012* (0.005)
H gives power [B]	-0.010* (0.005)	0.009 (0.005)	0.018** (0.006)	0.025*** (0.006)	0.006 (0.003)	0.005 (0.004)	0.003 (0.006)	0.004 (0.005)
HW-Agree that W has role [C]	-0.023*** (0.005)	0.009* (0.004)	0.048*** (0.006)	0.026*** (0.006)	0.006* (0.003)	-0.002 (0.004)	0.023*** (0.006)	0.027*** (0.005)
Dependent variable mean	0.172	0.175	0.780	0.787	0.078	0.137	0.464	0.209
Observations	71,380	81,150	35,351	35,503	84,308	80,511	81,163	81,163
R-squared	0.079	0.018	0.16	0.203	0.191	0.055	0.102	0.045
p-value A=B	0.018	0.853	0.009	0.701	0.024	0.999	0.082	0.000
p-value A=C	0.429	0.891	0.028	0.784	0.020	0.034	0.010	0.067
p-value B=C	0.000	0.939	0.000	0.884	0.802	0.032	0.000	0.000

Robust logistic regression reporting marginal effects adjusted for individual, couple, and household characteristics and country fixed effects.

*p-value < 0.05 **p-value < 0.01 ***p-value < 0.001

Next, we examine child health outcomes and women’s decision-making. Anthropometric measures are often used as indicators of individual-level poverty and other areas of health, whereas vaccination is often used as an indicator of both health care access and parental investment in child health.

Women’s agency associated with spousal agreement is positively correlated with increased vaccination in girls. Table 10 shows that the likelihood of girls being vaccinated is 3.7 percentage points higher for couples with spousal agreement than for couples in which women have no decision role. This is equivalent to 8 percent increase in vaccination when compared to the

average rate.⁶ Spousal agreement agency and decreased stunting in boys are also correlated in a statistically significant way. With respect to the unconditional mean of about a quarter (almost 1 in four boys are stunted in South Asia), the reduction associated with this type of women agency is of 2.4 percentage points or, equivalently, 10%.

Women taking power has a negative and significant association with girl child stunting; with mothers who take power being 2 percentage points less likely to have stunted daughters as compared to mothers who have no decision-making role. While overall findings are insignificant, the way that couple decision-making impacts child health may differ between girl and boy children, with some evidence that the wife taking power may more positively impact girl child health.

Table 10: Child outcomes

	Girls			Boys		
	Wasted	Stunted	Vaccinated	Wasted	Stunted	Vaccinated
Marginal Effects (SE)						
	(1)	(2)	(3)	(4)	(5)	(6)
W takes power [A]	0.002 (0.007)	-0.020* (0.009)	0.005 (0.012)	-0.007 (0.008)	-0.006 (0.010)	0.001 (0.012)
H gives power [B]	-0.002 (0.007)	-0.007 (0.009)	0.014 (0.013)	-0.005 (0.008)	-0.004 (0.009)	-0.005 (0.013)
HW-Agree that W has role [C]	-0.001 (0.007)	-0.014 (0.008)	0.037** (0.012)	-0.006 (0.007)	-0.024** (0.009)	-0.004 (0.012)
Dependent variable mean	0.109	0.213	0.466	0.131	0.237	0.487
Observations	25,616	25,619	16,150	25,616	25,619	16,150
R-squared	0.022	0.041	0.003	0.022	0.034	0.004
p-value A=B	0.601	0.090	0.428	0.764	0.731	0.623
p-value A=C	0.601	0.413	0.003	0.899	0.011	0.626
p-value B=C	0.801	0.258	0.034	0.824	0.002	0.955

Robust logistic regression adjusted reporting marginal effects for individual, couple, and household characteristics and country fixed effects. Sample includes children born in the period of past 5 years for wasting and stunting and in the past 3 years for vaccinations.

*p-value < 0.05 **p-value < 0.01 ***p-value < 0.001

⁶ The calculation is as follows: 8% = 0.037 [the marginal effect in table 9, column (3)] / 0.466 [the dependent variable mean].

A simple back of the envelope calculation can help highlight the relevance of these results. Approximately 34 percent of the 16,150 couples with vaccination data in our estimation sample are couples where partners agree that the wife has a decision role. If we assume that this percentage were to increase to 100 percent, and nothing else changed, the increase in the number of vaccinated girls and the reduction of stunted boys would be 5 percent and 6 percent vis-à-vis the baseline,⁷ respectively. In the past 10 years, the overall vaccination rate increased by 18 percentage while stunting decreased by 10 percentage points. This simple calculation shows the remarkable strength of the associations between (the spousal agreement type of) women agency and children's health. The magnitude of the associations is equivalent to about one-third of a decade of progress in vaccination and two-thirds of a decade-long reduction in stunting.

Domestic violence outcomes

While women's agency, and specifically decision-making participation, is postulated to be protective against intimate partner violence, findings in empirical studies are largely inconclusive. In some cases, women making decisions alone has been found to be correlated with increased risk of domestic violence (Seymour and Peterman 2018; Yount and Li 2009; Peterman et al. 2017). In Table 11, we show that, controlling for women's and household characteristics and country fixed effects, both women taking power and spousal agreement are significantly ($p < 0.001$) negatively correlated with all domestic violence measures.

⁷ The total sample is 16,150. Of this total sample, 10,560 couples form the group where husband and wife do not agree that the wife has a decision-making role. Applying the marginal effect of H-W agreeing (3.7 pp) to this group would result in 391 additional couples who would get their daughter vaccinated ($10,560 \times 0.037 = 391$). The average rate of vaccination is 47% or 7,591 of the full 16,150 couples. The increase of 391 is equivalent to 5.1% of 7,591. The same calculation method is used for the example of stunting for boys.

Table 11: Domestic violence outcomes

	Emotional violence	Less severe violence	Severe violence	Sexual violence	IPV last 12 months	Husband justifies wife beating	Wife justifies wife beating
	Marginal Effects (SE)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
W takes power [A]	-0.036*** (0.005)	-0.046*** (0.006)	-0.022*** (0.004)	-0.027*** (0.003)	-0.048*** (0.006)	-0.027*** (0.005)	-0.049*** (0.006)
H gives power [B]	-0.007 (0.005)	-0.007 (0.006)	-0.002 (0.004)	-0.008* (0.003)	-0.006 (0.006)	-0.069*** (0.005)	-0.006 (0.006)
HW-Agree that W has role [C]	-0.065*** (0.004)	-0.058*** (0.006)	-0.038*** (0.004)	-0.041*** (0.003)	-0.069*** (0.005)	-0.124*** (0.005)	-0.084*** (0.006)
Dependent variable mean	0.164	0.312	0.094	0.064	0.263	0.358	0.494
Observations	60,329	60,329	60,319	60,313	60,331	80,937	80,804
R-squared	0.073	0.065	0.073	0.042	0.069	0.108	0.087
p-value A=B	0.000	0.000	0.000	0.000	0.000	0.000	0.000
p-value A=C	0.000	0.009	0.000	0.000	0.000	0.000	0.000
p-value B=C	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Robust logistic regression adjusted for women's demographic factors and empowerment proxies, and both household and country fixed effects.

*p-value < 0.05 **p-value < 0.01 ***p-value < 0.001

For each measure in Table 11, the marginal effects of couple's agreement on wife's decision-making role are most beneficial with regard to domestic violence. For instance, women in partnerships where there is agreement are 6 percentage points less likely to experience emotional violence, less severe violence, and intimate partner violence in the past 12 months than women who do not participate in decision-making (Columns 1,2 and 5). As shown from the post-estimation tests of coefficient equality, the regression models show significantly lower probabilities for all violence outcomes among women who are in partnerships with agreement compared to those who take power (also refer to Appendix Table 2).

The only strongly significant correlation of domestic violence with the husband giving power is with husband justification of wife beating (Table 11, Column 6). The probability of justification of wife-beating, here defined as agreeing that at least one scenario (arguing, leaving without

permission, burning food, neglecting children, or refusing sex) justifies beating, are significantly lower by 7 percentage points among husbands who give power to their wives. However, it should be noted that the probability of husbands justifying wife beating decrease across all three decision-making indicators. It is important to note that we are unable to suggest causal direction here; it may be couple concordance leading to less domestic violence or less domestic violence leading to the concordance.

Health care decision participation and outcomes

In addition to the decision on household purchases, the DHS also asks women if they decide alone, jointly, or do not participate in the decisions around their own personal health care. We are unable to explore taking and giving power with this decision, as male partners were not asked about their female partner's health care, but we are able to explore whether certain outcomes are correlated with women's report of whether they decide alone or jointly with their husband on health care. Appendix Table 3 outlines proportions of husbands and wives who have agency over their own health care decisions. In Table 12, we take all women's health and domestic violence outcomes that were significant for taking power in Tables 9 and 11 and regress these against women deciding alone about her health care versus women deciding jointly about her health care.

As was found with women deciding alone versus jointly on household purchases, women who decide alone about their health care are significantly more likely to experience all types of domestic violence as compared to women who decide jointly with their husband about their health care (Table 12). Interestingly, we do not find any significant correlations between women deciding alone on health care and family planning outcomes.

Table 12: Select outcomes by women alone or joint decision about own health care

Marginal Effects (SE)						
Health						
	BMI: underweight	Used prenatal help	More than 8 antenatal visits	Ever used assistance during delivery		
W decides alone vs. decides jointly	0.005	-0.007	0.003	0.006		
	(0.005)	(0.008)	(0.003)	(0.008)		
Dependent variable mean	0.172	0.780	0.078	0.787		
Observations	51,847	23,040	56,951	23,051		
R-squared	0.084	0.149	0.186	0.187		
Domestic Violence						
	Emotional violence	Less severe violence	Severe violence	Sexual violence	IPV last 12 months	Wife justifies wife beating
W decides alone vs. decides jointly	0.005***	-0.007***	0.003***	0.006***	0.067***	0.085***
	(0.005)	(0.008)	(0.003)	(0.008)	(0.004)	(0.006)
Dependent variable mean	0.172	0.780	0.078	0.787	0.164	0.312
Observations	51,847	23,040	56,951	23,051	42,926	42,927
R-squared	0.084	0.149	0.186	0.187	0.061	0.062

Robust logistic regression adjusted for individual, couple, and household characteristics and country fixed effects; p-value < 0.05 **p-value < 0.01 ***p-value < 0.001

These findings suggest an effect of women being ‘penalized’ for making decisions alone through domestic violence. However, the relationship could also go the other direction in which abuse leads to women not participating in decision-making about their own health care.

6. Discussion and conclusions

This paper uses cross-sectional data from six South Asian countries to look at the relationship between types of women’s agency and family well-being outcomes. An important finding is that all women with any kind of agency, whether taking power, agreeing, or being given power, are positively correlated with other proxies of empowerment as compared to women who do not have any agency. This supports the theoretical framework of empowerment: agency is a key facilitator of household well-being outcomes, and therefore a key component of women’s

empowerment. Through understanding women's reporting of their participation in household decisions, we are able to capture women's recognition of their own contribution, if not their ability to contribute, to household decisions. Through acknowledging male partner reporting of women's participation in household decisions, found in both giving power and couple agreement, we are able to better understand contexts that support or oppress women's agency. Overall, our findings are similar to those of Annan et al. in Sub-Saharan Africa.⁸

Both cases of women claiming more power than their husbands accord them and of spousal agreement are significantly and positively correlated with less violence and improved health outcomes. Older women, more educated women, employed women who work outside the home, women who have been married longer, and women with higher household wealth are more likely to report participation in decisions, in either the case of their husband agreeing or disagreeing that they do. These significant correlations highlight that typical demographic empowerment proxies are found among women who exert agency in their homes. The fact that these empowerment proxies correlate with our agency indicators also provides validity to our measures of interest.

Overall, empowerment proxies correlate in the same way with taking power and spousal agreement when compared to women with no agency. However, younger women are more likely to take power than agree and more educated women are more likely to agree than take power. These dynamics may speak to the quality of relationships, supported by our findings that spousal agreement is more beneficially associated with well-being outcomes than taking power. Particularly with domestic violence outcomes, emotional violence, less severe violence, severe violence, sexual violence, current IPV, and wife-beating justification are 1 to 9 percentage points significantly higher among women who take power than women whose spouses agree. Agreement on her role is also positively associated with girl children's vaccinations and negatively with boys' stunting. We argue that these results support men's recognition of women's agency as a key component of women's empowerment.

⁸ A summary of this comparison is found in Appendix Table 4.

Our findings on husbands giving power also speak to the importance of spousal support for women's agency. Husbands are more likely to give power when their wife is younger, less educated, not working, and when the couple has been married for less time. Further, when comparing taking power to giving power, we found that greater differences in both education and age between couples are significantly more associated with giving power than taking power. Giving power reporting could be one of three scenarios: 1) women are not confident in or do not recognize their contribution to decisions and therefore do not report they are participating when they actually are, which may be likely in younger, less educated, and newly married women, 2) men are reporting women's participation on the survey as a reflection of their belief that women should be participating though they are not or 3) men are lying about women's participation on the survey as a form of social desirability bias. Our findings linking giving power to well-being outcomes support the first and second scenarios. While giving power is less associated with various well-being outcomes as compared to the other decision-making indicators, giving power shows similar significant associations with maternal health outcomes as taking power does and is associated with decreased sexual violence and male justification of wife beating. We are limited in our ability to causally connect these outcomes with decision-making processes in the home. However, these findings support an observation that husbands recognizing, if not encouraging, women's household agency may be associated with improved health and domestic violence outcomes.

Our analysis explores correlations between women's agency and outcomes and due to its cross-sectional nature and concerns of endogeneity, we are unable to make causal claims. Several of the outcomes, such as health and IPV, may be simultaneously determined with women's agency and our estimations may be omitting unobserved characteristics that affect these outcomes. However, the correlations themselves highlight the importance of studying discordance. Another limitation is that we cannot consider important spheres of decision-making, including decisions that are typically male dominated such as on financial planning or employment. More research is needed to establish a causal link between discordance and outcomes and to include other

notions of agency. Further, this paper, and much of the household decision-making literature, is limited to exploring only who makes decisions, without understanding the decision-making process within couples.

We recommend further research on how couples negotiate to better evaluate women's active agency and the household processes through which women are granted space to exercise agency. Many policy measures, such as cash transfers and microfinance instruments, are targeted specifically towards women. The effects of these policies are mediated by other members of the household. In South Asia, we find that approximately half of the couples disagree on who within the household usually makes decisions. Given that we find agreement/disagreement to be informative on well-being outcomes, this provides a key message for domestic violence and women's empowerment programming: promoting quality couple communication in South Asia is needed. Our paper is policy relevant through speaking to the importance of studying both household decision-making agreement and male engagement as a means to advance the women's empowerment agenda.

7. References

- Alderman, Harold, Pierre André Chiappori, Lawrence Haddad, John Hoddinott, and Ravi Kanbur. 1995. "Unitary versus Collective Models of the Household: Is It Time to Shift the Burden of Proof?" *World Bank Research Observer* 10 (1): 1–19. <https://doi.org/10.1093/wbro/10.1.1>.
- Allendorf, Keera. 2007. "Do Women's Land Rights Promote Empowerment and Child Health in Nepal?" *World Development* 35 (11): 1975–88. <https://doi.org/10.1016/j.worlddev.2006.12.005>.
- . 2012. "Women's Agency and the Quality of Family Relationships in India Keera." *Population Research and Policy Review* 31 (2): 187–206. <https://doi.org/10.1016/j.physbeh.2017.03.040>.
- Almås, I., Armand, A., Attanasio, O., & Carneiro, P. (2018). Measuring and changing control: Women's empowerment and targeted transfers. *The Economic Journal*, 128(612), F609-F639.

- Ambler, Kate, Cheryl Doss, Caitlin Kieran, and Simone Passarelli. 2019. "He Says, She Says: Spousal Disagreement in Survey Measures of Bargaining Power." *Economic Development and Cultural Change*. <https://doi.org/10.1086/703082>.
- Annan, Jeannie, Aletheia Donald, Markus Goldstein, Paula Gonzalez Martinez, and Gayatri Koolwal. 2021. "Taking Power: Women's Empowerment and Household Well-Being in Sub-Saharan Africa," *World Development* (forthcoming) <https://doi.org/10.1016/j.worlddev.2020.105292>.
- Ashraf, Nava. 2009. "Spousal Control and Intra-Household Decision Making: An Experimental Study in the Philippines." *American Economic Review* 99 (4): 1245–77. <https://doi.org/10.1257/aer.99.4.1245>.
- Becker, Stan, Fannie Fonseca-Becker, and Catherine Schenck-Yglesias. 2006. "Husbands' and Wives' Reports of Women's Decision-Making Power in Western Guatemala and Their Effects on Preventive Health Behaviors." *Social Science and Medicine* 62 (9): 2313–26. <https://doi.org/10.1016/j.socscimed.2005.10.006>.
- Beegle, Kathleen, Elizabeth Frankenberg, and Duncan Thomas. 2001. "Bargaining Power within Couples and Use of Prenatal and Delivery Care in Indonesia." *Studies in Family Planning*.
- Bourguignon, Browning, Chiappori, and Lechene. 1993. "Intra Household Allocation of Consumption: A Model and Some Evidence from French Data." *Annales d'Économie et de Statistique*, no. 29: 137. <https://doi.org/10.2307/20075899>.
- Browning, M., F. Bourguignon, P. A. Chiappori, and V. Lechene. 1994. "Income and Outcomes: A Structural Model of Intrahousehold Allocation." *Journal of Political Economy* 102 (6): 1067–96. <https://doi.org/10.1086/261964>.
- Calvi, Rossella. 2020. "Why Are Older Women Missing in India? The Age Profile of Bargaining Power and Poverty." *Journal of Political Economy* 128 (7). <https://doi.org/10.2139/ssrn.3190369>.
- Chang, Wei, Lucia Diaz-Martin, Akshara Gopalan, Eleonora Guarnieri, Seema Jayachandran, and Claire Walsh. 2020. "What Works to Enhance Women's Agency: Cross-Cutting Lessons from Experimental and Quasi-Experimental Studies." J-PAL Working Paper. <https://doi.org/10.1049/oap-cired.2017.1227>.
- Donald, Aletheia, Gayatri Koolwal, Jeannie Annan, Kathryn Falb, and Markus Goldstein. 2017. "Measuring Women's Agency." World Bank Policy Research Working Paper #8148.
- Doss, Cheryl. 2013. "Intrahousehold Bargaining and Resource Allocation in Developing Countries." *World Bank Research Observer* 28 (1): 52–78. <https://doi.org/10.1093/wbro/lkt001>.
- Duflo, Esther. 2012. "Women Empowerment and Economic Development." *Journal of Economic Literature* 50 (4): 1051–79. <https://doi.org/10.1257/jel.50.4.1051>.
- Duflo, Esther, and Christopher Udry. 2004. "Intrahousehold Resource Allocation in Cote d' Ivoire : Social Norms , Separate Accounts and Consumption Choices *." NBER WORKING PAPER SERIES.

- Dunbar, Geoffrey R., Arthur Lewbel, and Krishna Pendakur. 2013. "Children's Resources in Collective Households: Identification, Estimation, and an Application to Child Poverty in Malawi." *American Economic Review* 103 (1): 438–71. <https://doi.org/10.1257/aer.103.1.438>.
- Ebrahim, Nasser B., and Madhu S. Atteraya. 2019. "Women's Household Decision-Making and Intimate Partner Violence in Ethiopia." *Academic Journal of Interdisciplinary Studies* 8 (2): 285–92. <https://doi.org/10.2478/ajis-2019-0041>.
- Furuta, Marie, and Sarah Salway. 2006. "Women's Position within the Household as a Determinant of Maternal Health Care Use in Nepal." *International Family Planning Perspectives* 32 (1): 17–27. <https://doi.org/10.1363/3201706>.
- Hameed, Waqas, Syed Khurram Azmat, Moazzam Ali, Muhammad Ishaque Sheikh, Ghazunfer Abbas, Marleen Temmerman, and Bilal Iqbal Avan. 2014. "Women's Empowerment and Contraceptive Use: The Role of Independent versus Couples' Decision-Making, from a Lower Middle Income Country Perspective." *PLoS ONE* 9 (8). <https://doi.org/10.1371/journal.pone.0104633>.
- Haushofer, Johannes, Charlotte Ringdal, Jeremy Shapiro, and Xiao Yu Wang. 2020. "Spousal Disagreement in Reporting of Intimate Partner Violence in Kenya." *AEA Papers and Proceedings* 110: 620–24. <https://doi.org/10.1257/pandp.20201049>.
- Hindin, Michelle J., and Linda S. Adair. 2002. "Who's at Risk? Factors Associated with Intimate Partner Violence in the Philippines." *Social Science and Medicine* 55 (8): 1385–99. [https://doi.org/10.1016/S0277-9536\(01\)00273-8](https://doi.org/10.1016/S0277-9536(01)00273-8).
- Kabeer, Naila. 1999. "Resources , Agency , Achievements : Re - Ections on the Measurement of Women ' s Empowerment" 30 (May): 435–64.
- . 2001. "Conflicts over Credit: Re-Evaluating the Empowerment Potential of Loans to Women in Rural Bangladesh." *World Development* 29 (1): 63–84. [https://doi.org/10.1016/S0305-750X\(00\)00081-4](https://doi.org/10.1016/S0305-750X(00)00081-4).
- Lacroix, Guy, Olivier Bargain, and Luca Tiberti. 2019. "Intra-Household Allocation and Individual Poverty : An Assessment of Collective Models Using Direct Evidence on Sharing."
- Malhotra, Anju, Sidney Ruth Schuler, and Carol Boender. 2005. "Women's Empowerment as a Variable in International Development." *World Bank Background Paper*, 71–88. <https://doi.org/10.1596/0-8213-6057-4>.
- Mumtaz, Zubia, and Sarah Salway. 2009. "Understanding Gendered Influences on Women's Reproductive Health in Pakistan: Moving beyond the Autonomy Paradigm." *Social Science and Medicine* 68 (7): 1349–56. <https://doi.org/10.1016/j.socscimed.2009.01.025>.
- Peterman, Amber, Audrey Pereira, Jennifer Bleck, Tia M. Palermo, and Kathryn M. Yount. 2017. "Women's Individual Asset Ownership and Experience of Intimate Partner Violence: Evidence from 28 International Surveys." *American Journal of Public Health* 107 (5): 747–55. <https://doi.org/10.2105/AJPH.2017.303694>.
- Sen, Amartya. 1999. "Developmet as Freedom." Oxford Paperbacks.

- Seymour, Greg, and Amber Peterman. 2018. "Context and Measurement: An Analysis of the Relationship between Intrahousehold Decision Making and Autonomy." *World Development* 111: 97–112. <https://doi.org/10.1016/j.worlddev.2018.06.027>.
- Story, William T., and Sarah A. Burgard. 2012. "Couples' Reports of Household Decision-Making and the Utilization of Maternal Health Services in Bangladesh." *Social Science and Medicine* 75 (12): 2403–11. <https://doi.org/10.1016/j.socscimed.2012.09.017>.
- Thomas, Duncan. 1990. "Intra-Household Resource Allocation: An Inferential Approach." *The Journal of Human Resources* 25 (4): 635–64.
- Uddin, Jalal, Mohammad Habibullah Pulok, and Md Nasim Us Sabah. 2016. "Correlates of Unmet Need for Contraception in Bangladesh: Does Couples' Concordance in Household Decision Making Matter?" *Contraception* 94 (1): 18–26. <https://doi.org/10.1016/j.contraception.2016.02.026>.
- Udry, Christopher. 1996. "Gender , Agricultural Production , and the Theory of the Household Author (s): Christopher Udry Source : *Journal of Political Economy* , Vol . 104 , No . 5 (Oct . , 1996) , Pp . 1010-1046 Published by : The University of Chicago Press Stable URL : [Http://](http://)" *Journal of Political Economy* 104 (5): 1010–46.
- Unicef. 2019. "Gender Counts: South Asia."
- Wong, Yen Nee. 2012. "World Development Report 2012: Gender Equality and Development." *Forum for Development Studies* 39 (3): 435–44. <https://doi.org/10.1080/08039410.2012.722769>.
- World Bank. 2005. *Measuring Empowerment: Cross-Disciplinary Perspectives*. Edited by Deepa Narayan-Parker.
- Yount, Kathryn M., and Li Li. 2009. "Women's 'Justification' of Domestic Violence in Egypt." *Journal of Marriage and Family* 71 (5): 1125–40. <https://doi.org/10.1111/j.1741-3737.2009.00659.x>.
- Zegenhagen, S., Meghna Ranganathan, and Ana Maria Buller. 2019. "Household Decision-Making and Its Association with Intimate Partner Violence: Examining Differences in Men's and Women's Perceptions in Uganda." *SSM - Population Health* 8 (December 2018). <https://doi.org/10.1016/j.ssmph.2019.100442>.

Appendix

Appendix Table 1: Couple reports on decision on large household purchases

	Decision making response	Sample size (couples)	Wife (%)	Husband (%)	(1) - (2)
			(1)	(2)	mean difference
Afghanistan	Respondent alone	10,138	1.48	53.47	-0.521***
	Respondent and partner		39.17	30.94	0.083***
	Husband/ wife alone		45.74	2.19	0.435***
Bangladesh	Respondent alone	1,818	5.67	35.42	-0.246***
	Respondent and partner		71.34	61.19	0.042***
	Husband/ wife alone		22.00	2.57	0.200***
India	Respondent alone	63,325	6.13	23.70	-0.176***
	Respondent and partner		68.25	68.21	0.001
	Husband/ wife alone		21.06	6.41	0.146***
Maldives	Respondent alone	1,985	23.53	10.51	0.130***
	Respondent and partner		65.44	36.04	0.295***
	Husband/ wife alone		7.66	50.90	-0.434***
Nepal	Respondent alone	2,393	25.28	30.47	-0.053***
	Respondent and partner		20.98	27.17	-0.063***
	Husband/ wife alone		31.97	22.54	0.093***
Pakistan	Respondent alone	3,332	2.99	41.18	-0.381***
	Respondent and partner		37.42	41.84	-0.045***
	Husband/ wife alone		40.87	1.62	0.392***

Appendix Table 2: Domestic violence outcomes by taking power vs. agreeing

	Emotional violence	Less severe violence	Severe violence	Sexual violence	IPV last 12 months	Husband justifies wife beating	Wife justifies wife beating
	Marginal effects (SE)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
W takes power vs HW-Agree that W has role	0.023*** (0.003)	0.013** (0.005)	0.012*** (0.003)	0.013*** (0.002)	0.020*** (0.004)	0.097*** (0.004)	0.035*** (0.004)
Dependent variable mean	0.164	0.312	0.094	0.064	0.263	0.358	0.494
Observations	39,499	39,500	39,494	39,489	39,500	51,871	51,825
R-squared	0.058	0.055	0.064	0.031	0.055	0.074	0.064

Robust logistic regression adjusted for women's demographic factors and empowerment proxies, and both household and country fixed effects; *p-value < 0.05 **p-value < 0.01 ***p-value < 0.001

Appendix Table 3: Couple reports on decision on respondent's health care					
		Sample size (couples)	Wife (%)	Husband (%)	(1) - (2)
			(1)	(2)	Mean difference
Afghanistan	Respondent alone	10,137	3.02	62.2	-0.592***
	Respondent and partner		40.88	26.38	0.145***
	Husband/ wife alone		46.9	2.97	0.439***
India	Respondent alone	63,325	9.11	33.42	-0.243***
	Respondent and partner		66.65	55.08	0.116***
	Husband/ wife alone		21.96	10.69	0.113***
Maldives	Respondent alone	1,985	16.17	33.25	-0.171***
	Respondent and partner		73.9	42.12	0.318***
	Husband/ wife alone		9.72	24.13	-0.144***
Nepal	Respondent alone	2,393	13.58	52.19	-0.386***
	Respondent and partner		37.74	32.8	0.049***
	Husband/ wife alone		39.53	7.69	0.319***
Pakistan	Respondent alone	3,279	5.79	48.31	-0.425***
	Respondent and partner		40.26	39.43	0.008
	Husband/ wife alone		44.04	5.67	0.384***

Appendix Table 4: Summary for SAR versus SSA		
<i>Strongest significant ($p < 0.01$) beneficial correlation</i>		
	SAR	SSA
BMI	HW agree	HW agree
Prenatal care	HW agree	HW agree
Assisted delivery	Taking power	HW agree
Antenatal care	Taking power	HW agree
Modern contraception W	HW agree	HW agree
Modern contraception H	HW agree	HW agree
Vaccination girl	HW agree	HW agree
Stunting boy	HW agree	HW agree
Emotional violence	HW agree	HW agree
Less severe violence	HW agree	HW agree
Severe violence	HW agree	HW agree
Sexual violence	HW agree	HW agree
IPV 12 months	HW agree	.
Husband justifies wife-beating	HW agree	.
Wife justifies wife-beating	HW agree	.