What works to enhance women's agency: Cross-cutting lessons from experimental and quasi-experimental studies*

J-PAL Working Paper

July 2020

Wei Chang, Lucía Díaz-Martin, Akshara Gopalan, Eleonora Guarnieri, Seema Jayachandran, Claire Walsh

Abstract: Women's agency continues to be limited in many contexts around the world. Much of the existing evidence synthesis focuses on one outcome or intervention type, bracketing the complex, overlapping manner in which agency takes shape. This review adopts a cross-cutting approach to analyzing evidence across different domains and outcomes of women's agency and focuses on understanding the mechanisms that explain intervention impacts. Drawing from quantitative evidence from 160 randomized controlled trials and quasi-experiments in low- and middle-income countries, we summarize what we know about supporting women's agency along with what needs additional research.

*We thank Nandita Bhan, Diva Dhar, Sarah Gammage, Kate Glynn-Broderick, Donald Green, Rachel Heath, Sonia Laszlo, Pace Phillips, and Soledad Prillaman who provided invaluable comments. All errors are our own. We thank the Bill & Melinda Gates Foundation for funding this work.

- ¹ University of North Carolina at Chapel Hill
- 2 Abdul Latif Jameel Poverty Action Lab (J-PAL)
- 3 ifo Institute
- 4 Northwestern University

Table of Contents

| List of Abbreviations | 3 |
|---|----|
| 1. Introduction | 4 |
| 2. Literature Review Methodology | 10 |
| 3. Cross-Cutting Findings on Women's Agency | 13 |
| 4. Direct Indicators of Agency | 22 |
| 4.1. "Power within" | 23 |
| 4.2. Household decision-making | 32 |
| 4.3. Freedom of movement | 39 |
| 4.4. Freedom from violence | 43 |
| 5. Indirect Indicators of Agency | 52 |
| 5.1. Family domain of agency | 52 |
| 5.1.1. Timing of marriage and childbearing | 53 |
| 5.1.2. Contraceptive use | 58 |
| 5.2. Economic domain of agency | 61 |
| 5.2.1. Labor force participation | 61 |
| 5.2.2. Income generation from entrepreneurship | 69 |
| 5.3. Community and political domain of agency | 76 |
| 5.3.1. Participation in politics and in community decision-making | 76 |
| 5.3.2. Voting behaviors | 80 |
| 5.3.3. Participation in groups and ties in the community | 81 |
| 6. Additional Notes on Women's Agency | 84 |
| 6.1. Engaging men | 84 |
| 6.2. Measuring women's agency | 85 |
| 7. Conclusion | 87 |

List of Abbreviations

CCT: Conditional Cash Transfer

DID: Difference-in-Differences

ELA: Empowerment and Livelihood for Adolescents

IPV: Intimate Partner Violence

LMIC: Low- and Middle-Income Country

NGO: Non-Governmental Organization

PLA: Participatory Learning and Action

RCT: Randomized Controlled Trial

RD: Regression Discontinuity

SHG: Self-Help Group

UCT: Unconditional Cash Transfer

VSLA: Village Savings and Loan Association

1. Introduction

Women's agency continues to be severely limited in many contexts around the world. Women in low-and middle-income countries (LMICs) on average report less freedom of choice, control over one's life, say in household decision-making, and life satisfaction compared to men in the same countries and women in wealthier countries (Jayachandran 2015). At the institutional level, social norms around early marriage, having sons versus daughters, domestic and unpaid care work, and women in the workforce and politics further limit women's opportunities based on their gender (Buchmann et al. 2018; Dhar, Jain, and Jayachandran 2018; Jayachandran 2015). Increasing women's agency is widely considered to be a key component of reducing gender inequality and improving women's outcomes in multiple, intersecting domains. Yet, comprehensive insights that speak to mechanisms and cut across the many areas in which women can gain and express agency are limited.

In this literature review, we define women's agency as their ability to define goals and act on them, to make decisions that matter to them, and to participate in the economy and public life (Donald et al. 2017; Kabeer 1999; Laszlo et al. 2017). As defined by Amartya Sen (2000), an agent is "someone who acts and brings about change, and whose achievements can be judged in terms of her own values and objectives." As Naila Kabeer (2005) outlines, agency is a fundamental part of empowerment and implies exercising choices in ways that challenge power relations. These definitions of agency follow theoretical feminist traditions related to women's right to self-determination in the context of widespread gender inequality. Agency can accordingly take many shapes across different domains and settings; improvements in women's agency are valuable in their own right in addition to being instrumental to other aspects of women's well-being (Donald et al. 2017).

The unique contribution of this literature review is its cross-cutting approach to analyzing evidence across different domains of women's agency and its focus on understanding the mechanisms that explain intervention impacts. Agency is inherently multi-faceted, yet much of the existing evidence synthesis related to enhancing women's agency focuses on one outcome or intervention type (e.g., economic empowerment, reproductive health, and political participation), bracketing the complex, overlapping manner in which agency takes shape. We attempt to complement domain-specific analyses by analyzing common mechanisms and moderating factors (e.g., gender norms, power dynamics, and access to resources) that may affect how interventions enhance women's agency across intervention types or outcomes.

Drawing from Laszlo et al.'s (2017) conceptual framework to define direct and indirect indicators of women's economic empowerment, we develop a framework for classifying direct and indirect indicators of women's agency and review the corresponding evidence from 143 unique studies published in 160 papers. In doing so, we consider the cross-cutting and domain-specific evidence, mechanisms, and moderating factors to understand what approaches are effective for enhancing women's agency in multiple domains. We draw from rigorous quantitative evidence—experimental and quasi-experimental studies—to summarize what we know about supporting women's agency along with what needs additional research.

This review is organized into the following sections. The Literature Review Methodology section summarizes our methodology. The Crosscutting Findings on Women's Agency section provides a high-level overview that summarizes our main insights across indicators of women's agency. The Direct Indicators of Agency section reviews in greater detail the evidence related to the four direct indicators of women's agency, including "power-within,5" household decision-making, freedom of movement, and freedom from violence, followed by the Indirect Indicators of Agency section that reviews the evidence related to the seven indirect indicators of agency within the family, economic, and community and political domains. Finally, the Additional Notes on Women's Agency section briefly discusses two topics, engaging men and measuring women's agency, that emerged as common themes in the literature but are beyond the scope of this review.

In the Crosscutting Findings Section, we summarize how many studies across several domains identified, unsurprisingly, that gender norms surrounding women's agency moderated the impacts of many interventions. Access to financial resources alone, without addressing gender-specific constraints, was not a mechanism that consistently improved women's agency. Giving women more direct control over resources, often by employing design or program features such as privacy or digital payment systems, was a mechanism that consistently led to improvements in women's agency. However, design features that allowed women to hide decisions from their spouses might not offer long-term solutions for improving agency due to power imbalances based on gender. We also found that the timing of marriage and childbearing for young women offered key margins for improvements. It seemed much more challenging to change household decision-making dynamics within a marriage, perhaps because women did not have good outside options. Programs that were designed to relieve multiple constraints women faced—which often included elements that raised awareness of gender dynamics or developed soft/life skills—appeared to be effective in improving women's agency. However, more research is needed on which mechanisms were driving impacts. Another promising area for further research is to evaluate programs that are specifically designed to shift individual and collective gender norms, including through mass media interventions.

Some of the programs and policies we reviewed had strong or moderately strong evidence across multiple indicators of agency. These included: 1) adolescent girls' programs that enhanced soft skills as a mechanism to improve girls' self-efficacy, attitudes about gender, income generation, and ties in the community; 2) laws that mandated equality by protecting women's property rights, removing labor restrictions, or guaranteeing women's representation in political decision-making as mechanisms to improve "power within," political participation, and labor force participation; 3) cash and in-kind transfer programs that enhanced women's freedom from violence and agency in decisions about marriage and childbearing while the programs were running; and 4) the Graduation approach6 that addressed multiple constraints extremely poor women faced to consistently increase income, consumption, assets, and

⁵ Internal belief in one's worth and ability (Kabeer 1999), measured through aspirations, self-efficacy, and attitudes about gender norms. Related to a woman's belief in her ability to set goals and act on them (Donald et al. 2017), some of these measures are considered subjective and focus on women's own perceptions of agency (Quisumbing, Rubin, and Sproule 2016).

⁶ This program combines multiple components designed to help start productive self-employment and aims to provide a "big push" to unlock the poverty trap. It includes a productive asset transfer (typically livestock), technical trainings related to the asset, consumption support, access to savings, and life skills or health information training.

political participation. We additionally identified a number of key lessons related to each direct and indirect indicator that we tracked in this review.

Framework for women's agency: direct and indirect indicators

There are a host of challenges related to accurately defining, measuring, and quantifying women's agency. First of all, while we acknowledge that sex, gender, and gender identity are distinct concepts that are not binary in nature, many quantitative surveys record only sex, often along a male/female binary. Thus, this literature review primarily speaks to gains and challenges that cisgender women face in societies organized around binary understandings of sex, gender, and gender identity. Research that speaks to a greater range of identities is important.

Further, since the ways people exercise agency, or the ability to make strategic life choices (Kabeer 1999), vary from person to person, it is challenging *ex ante* to outline the precise dimensions of agency. There is a resulting lack of empirical quantitative metrics that fully capture women's agency, although several important efforts are underway (The World Bank 2019; OECD Development Centre 2019; University of California San Diego 2019; MEASURE Evaluation 2019). Common metrics include decision-making questions that inquire about household choices relevant to women's well-being (e.g., household spending, decisions about health care, and visiting relatives/friends) and psychological constructs that aim to capture women's perceived ability to make life decisions (e.g., the Relative Autonomy Index, generalized self-efficacy, and locus of control measures). The choice of metrics varies across researchers, often because the metrics have not consistently been tested and validated across contexts (Martinez-Restrepo and Ramos-Jaimes 2017; Donald et al. 2017). It is also unclear to what extent many questions used to measure women's participation in decisions accurately capture women's actual decision-making power in the household (Martinez-Restrepo and Ramos-Jaimes 2017; Donald et al. 2017).

In addition to methodological limitations related to measuring agency and the resulting paucity of data, emphasizing individual psychology and decisions alone neglects other potential avenues that capture expressions of agency in societies with inherent barriers based on gender. For example, if social norms discourage female labor force participation, a woman's decision to enter the workforce seems to be a reasonable proxy of her expression of individual agency against strict impediments. Nonetheless, this proxy may not fully reflect the reality of the woman's preferences nor the decision-making process itself, including whether the job offers safety, decent conditions, or fair wages, and whether the woman in fact wants to be employed. Many studies that measure reasonable proxies of women's agency, such as labor force participation, delayed marriage and childbearing, and political participation, often don't measure psychological or decision-making constructs, making it difficult to piece together all of the relevant information needed to capture a full picture of agency.

Due to the lack of consistently used metrics for women's agency per se, along with resulting lack of data, this review goes beyond just psychological and decision-making constructs. We draw from multiple existing taxonomies of women's agency and empowerment to develop a framework employing two conceptions of agency: direct and indirect indicators of agency. We are influenced by Laszlo et al.'s (2017) classification for women's economic empowerment, which defined direct indicators as those

"directly related to a woman's ability to assert her preferences in decision-making," and indirect indicators as "outcomes of the decision-making process." Like Laszlo et al. (2017), we reference Kabeer (1999), who specifies that, in the process of empowerment, exercising agency should culminate in achievements or meaningful improvements in well-being (Kabeer 2005, 1999). We also draw from a range of researchers who have addressed the need to have domain-specific outcomes for conceptualizing and measuring empowerment (Malhotra, Schuler, and Boender 2002; Ibrahim and Alkire 2007; Alkire et al. 2013; Quisumbing, Rubin, and Sproule 2016). Understanding that achievements of agency are important insofar as they meaningfully reflect women's choices, status, and movement away from subordination, we attempt to connect the indirect measures of agency to local context and direct measures of agency where possible.

While the precise manifestations of agency will always vary between individuals, some aspects are fundamental to a woman's ability to make meaningful choices and act on them, and thus are **direct indicators of agency.** Incorporating the definitions and frameworks outlined above, we identify four direct indicators for this review, which we consider to be key outcomes that signal agency:

| Direct indicators | Definitions |
|-------------------------------|---|
| "Power within" | Internal belief in one's worth and ability (Kabeer 1999), measured through aspirations, self-efficacy, and attitudes about gender norms. Related to a woman's belief in her ability to set goals and act on them (Donald et al. 2017), some of these measures are considered subjective and focus on women's own perceptions of agency (Quisumbing, Rubin, and Sproule 2016). |
| Household decision- making | Women's participation in household decisions on a range of topics (e.g., spending money, visiting family/friends, health care for themselves and their children, etc.). |
| Freedom of movement | A woman's ability to choose where to go and when, a key manifestation of agency. |
| Freedom from violence | A woman's ability to live free of emotional, physical, or sexual violence, which embody an extreme limitation of a woman's agency. Measured through experiences of intimate partner violence (IPV) or violence against adolescent girls. |

Meanwhile, **indirect indicators of agency** are downstream outcomes that may reflect women's agency. Yet, since they may not fully capture a woman's ability to make meaningful choices and act on them, indirect indicators serve as proxy measures of "achievements of agency" (Kabeer 1999). We believe that indirect indicators are important, because as Sen outlined, downstream outcomes are inextricably linked to women's expressions of agency: "any practical attempt at enhancing the well-being of women cannot but draw on the agency of women themselves in bringing about such a change" (Sen 1999). As discussed by Alkire (2008), agency is domain-specific, and we thus identify seven indirect indicators of agency across three key domains:

| Domain of agency | Selected indirect indicators of agency |
|------------------|--|
| Family domain | Timing of marriage and childbearing Contraceptive use |

| Economic domain | Labor force participation Income generation from entrepreneurship |
|--------------------------------|---|
| Political and community domain | Participation in politics and community decision-making Voting behavior Participation in groups and ties in the community |

While we have identified a short list of indicators that we believe to be direct and indirect indicators of agency, we recognize that they do not individually constitute agency in a vacuum. Agency is not one-dimensional, but rather, as Alkire states, is characterized by a "conceptual plurality" (Alkire 2008). Gender inequality is complex and inconsistent; women can be empowered in one area and disempowered in another (Malhotra, Schuler, and Boender 2002). We thus consider these to be complementary aspects of agency, which, when combined, suggest but do not determine a woman's ability to act as an agent.

We recognize that our approach of equating certain indicators with women's agency will be unsatisfactory for some readers of this review. Some of our chosen indicators of agency might offer false positives and false negatives. That is, a lack of results along one of these indicators might not actually mean that a woman lacks agency, nor does movement along one of these indicators undoubtedly mean that a woman is expressing agency. In particular, the context and constraints women face in a particular setting, along with women's own beliefs and goals, are critical to understanding whether an outcome can truly be considered an indicator of women's agency. In addition, no decision about which outcomes to select as indirect indicators of agency is entirely free from value judgment. Our list inevitably leaves out some aspects of agency, partially because we were limited to the outcomes researchers measured. We focus on indicators where women across contexts and societies have sought and achieved meaningful progress. We will provide additional context for how each indicator can align with conceptions of women's agency, and when they can be confounding. Future research that aims to understand heterogeneity in how women gain and express agency (e.g., according to ethnicity, religion, class, and other identity categories) will additionally improve our understanding of how to enhance women's agency.

Intervention types and mechanisms

To better understand which approaches have been more or less effective in improving direct and indirect indicators of women's agency in various contexts and why, we analyze impact evaluations of interventions designed to improve women's agency. Therefore, this review is focused primarily on evaluations of programs that intentionally seek to improve women's agency and does not consistently include programs where agency was not a primary or secondary goal of the intervention. The studies in our review examined interventions of various designs, which fall under the following general intervention types:

| Intervention type | Description | |
|------------------------------|--|--|
| | General | |
| Information sharing | Providing information on key issues in a targeted manner, either through inviting a specific audience to receive information or through de facto geographic targeting (e.g., paper/leaflets that have limited geographic reach). | |
| Mass media intervention | Providing information on key issues in a non-targeted manner (i.e. general audience received information) through mass media channels (e.g., public screening of video, radio, television, etc.). | |
| Community mobilization | Capacity-building efforts through which community members plan and carry out community-wide activities on a participatory and sustained basis, usually with gender-related objectives (e.g., series of public events to educate on and reduce street harassment) or components that encourage women's participation (e.g., participatory groups to empower women to demand better health care services). | |
| Engaging men | Targeting men in programs with gender equality objectives (e.g., discussions, trainings, financial groups, etc.). | |
| Trainings | | |
| Technical skills | Training programs emphasizing business, financial, or vocational skills and knowledge required for employment or entrepreneurship; sometimes including an apprenticeship or internship and linkages to formal employers. | |
| Empowerment/life/soft skills | Training programs emphasizing women's and girls' ability to thrive in the world via empowerment, including psychosocial skills (e.g., locus of control and self-efficacy), soft skills (e.g., negotiation and goal setting), and life skills (e.g., reproductive health). Often cover many topics simultaneously. | |
| Adolescent girls programs | Training programs that are geared towards adolescent girls' skills acquisition, often delivered in a "safe space" model in an after-school setting with a peer leader/mentor. Other components such as microcredit or vocational training may be included. | |
| | Economic | |
| Microcredit | Providing small loans through banks or non-governmental organizations (NGOs) to be repaid with interest, either through communal group banking or through individual credit. | |
| Savings | Access to savings vehicles through bank accounts, savings groups, Self Help Groups (SHGs), or Village Savings and Loan Associations (VSLAs). The latter three involve women managing lending groups that pool savings, typically outside of formal banking systems, and also include elements of mutual support and social relationships. | |
| Business grant | Providing cash or in-kind support to businesses with the intention to support productive investments. | |
| Transfers | Providing cash or in-kind support to households with the intention to support household consumption or expenses. Conditional transfers require the funds to either be used for specific purposes or require certain conditions to be fulfilled prior to disbursement; unconditional transfers have no such requirements. In-kind transfers can be in the form of food or other consumables. | |
| Access to jobs/employment | Interventions that experimentally vary access to employment, such as access to recruitment services, job offers, or wage subsidies. | |
| Other | | |

| Multicomponent intervention | Can include a combination of the aforementioned interventions, e.g., the Graduation approach7 developed by BRAC (an NGO founded in Bangladesh). |
|-----------------------------|--|
| Land/property regulations | Laws and regulations that protect women's rights to own, acquire, and manage tangible or intangible properties (e.g., land, housing, bank accounts, etc.). |
| Gender quotas | Laws and regulations that reserve a defined proportion or number of seats for women in political or community representation. |
| Access to childcare | Policies and programs that provide families with affordable access to childcare services. |

We also analyze the interventions according to the mechanisms identified in the papers. In this review, we define mechanisms as the underlying pathways to which researchers attributed the impacts. In some cases, the mechanisms are empirically tested, while in other cases, the evidence is suggestive or anecdotal. We draw from these pathways to analyze trends across direct and indirect indicators of agency, identifying where there is evidence that a certain mechanism is effective in enhancing agency. In some instances, a direct indicator of agency might also operate as a mechanism (e.g., acceptance in more progressive social norms about gender, a part of "power within," could be a mechanism for reduced IPV). Where possible, we try to draw out these connections between indicators of agency.

We begin by summarizing our methodology. We then review the cross-cutting evidence on enhancing women's agency across indicators. This high-level overview is intended to serve as a summary of our main findings across sections. We then review in greater detail the evidence related to the four direct indicators of women's agency, followed by the seven indirect indicators of agency within the family, economic, and political and community domains. For each indicator, we summarized our key findings at the beginning of every section. Because we reference many studies across multiple sections, full descriptions of the studies are not repeated in every section. Appendix A offers additional details of the included studies.

2. Literature Review Methodology

In this section, we describe the methodology used in conducting the literature review, including the search and screening process, the search results, and the way evidence was synthesized.

Search and screening process

This review draws from studies that evaluated interventions targeted towards women or girls in LMICs through randomized controlled trials (RCTs) or quasi-experimental studies. The initial literature search aimed to identify studies that examined interventions to improve women's agency. The keywords used in the search strategy were developed around three key terms: women or girls, LMICs, and RCTs or natural experiments. The initial search was conducted in January 2019 in Scopus, PubMed, EMBASE, and

⁷ This program combines multiple components designed to help start productive self-employment and aims to provide a "big push" to unlock the poverty trap. It includes a productive asset transfer (typically livestock), technical trainings related to the asset, consumption support, access to savings, and life skills or health information training.

EconLit. We used combinations of the search terms applicable to each database. Additional searches were conducted in the 3ie Impact Evaluation Repository, 3ie Evidence Hub - Systematic Review, and the Campbell Systematic Reviews.

We expanded this body of literature in multiple ways. First, existing literature reviews identified in the search process were screened for additional studies, especially those synthesizing the effects of a specific type of interventions, such as cash transfers (Glassman et al. 2013; Bastagli et al. 2019). Second, a similar literature review that focuses on women's groups/collectives was conducted by our team concurrently. Papers identified in this "groups" review were included if relevant. Third, we consulted the Abdul Latif Jameel Poverty Action Lab's internal knowledge database and relevant policy publications for additional studies.

We followed a screening protocol to assess the relevance and quality of the studies retrieved. We conducted title and abstract screening in Covidence and included or excluded papers according to their topic and methodological relevance. The inclusion criteria applied in the screening process are based on a study's population, intervention, methodological approach, and setting. First, the study population should be women or girls or emphasize gender in analyzing heterogeneity. Second, studies should focus on measuring the impact of interventions, i.e., policies or programs designed to change certain outcomes. Third, studies should examine at least one outcome that is a direct or indirect indicator of women's agency defined by this review. Fourth, studies should use an approach that aimed at identifying causal effects and their relative size. In addition to RCTs, we included studies that used quasi-experimental designs with well-tested assumptions, including difference-in-differences (DID), instrumental variables, and regression discontinuity (RD). Last, studies should be set in the context of LMICs. We also included quantitative findings from studies using mixed methods and referred to qualitative studies if they contribute to the understanding of mechanisms. Pilots or ongoing studies were not included in this review.

Given the large body of literature on women's well-being in LMICs and this review's focus on women's agency, we searched for studies that examined interventions that target women or those that aim to improve women's agency as a program goal or a mechanism. Accordingly, we applied three categories of exclusion criteria in the screening process. First, since there is a large medical/public health literature that evaluates the impact of health services on maternal, sexual, or reproductive health in LMICs, we excluded studies on medical treatment or devices to prevent or cure diseases, such as condom use to prevent HIV, psychotherapy, or drugs. Similarly, we excluded interventions that aimed to improve health care utilization without an explicit aim to improve women's agency, such as health information campaigns to change health behaviors that did not address women's role in the decision-making process. We also excluded studies that measured only health or disease outcomes.

Second, we excluded development interventions that aimed to improve individuals' welfare without targeting women or did not have any gender-differential effects, such as training programs for both men and women that did not include any content related to gender or women's empowerment, policies that mandate compulsory education to improve schooling for boys and girls alike, and minimum wage laws. Third, under the family domain, we focused on early marriage and childbearing and excluded studies that looked at interventions' effects on fertility in adult women. By applying these exclusion criteria, we aimed to focus on a smaller set of literature that illustrates the mechanisms through which interventions

affect different indicators of women's agency, instead of conducting a systematic review on each of these indicators or intervention types. Meanwhile, we refer to existing reviews in the introduction paragraph of each indicator whenever possible in case readers are interested in a more comprehensive synthesis of evidence on specific subtopics.

Search results

The initial search for individual-level interventions yielded 2,654 unique papers. After title and abstract screening, 284 full-text papers were assessed for eligibility. An additional 53 papers on women's groups/collectives were added from the "groups" review. Additional papers were identified through hand-searching bibliographies of relevant reviews and policy publications or consulting topic experts. After applying our inclusion and exclusion criteria, 143 unique studies published in 160 papers were included in the review. The included papers cover six regions: sub-Saharan Africa (78), South Asia (52), Latin America and the Caribbean (18), East Asia and the Pacific (10), Middle East and North Africa (4), and Europe and Central Asia (1). In terms of study design, 131 are RCTs and 29 are quasi-experiments.

Evidence synthesis

We conducted a narrative synthesis of findings guided by the conceptual framework. To do so, we first captured key data from each of the included papers using a data extraction form designed by the research team and entered in a spreadsheet. Descriptive information included details of the evaluation design, details of the intervention, and main results. We then compiled an annotated bibliography and tagged each paper by its relevant indicators. The narrative synthesis presents the results reported in included papers and focuses on whether, and through what mechanisms, an intervention type leads to changes in specific indicators of women's agency.

The narrative review is organized by indicators of agency. The indirect indicators of agency are further grouped under three domains of agency (family, economic, and community and political). For each indicator, we provide an overview of the main takeaways, synthesize the literature by intervention type, and aim to identify mechanisms that affect each indicator using the nomenclature specified above. For example, under the family domain of agency, we first looked at "timing of marriage and childbearing," an indirect indicator of women's agency, and described whether and how different intervention types (e.g., cash transfers) operate through various mechanisms (e.g., access to financial resources) to reduce child marriage or delay childbearing. This process was repeated for other indicators under the family domain of agency. We reported results of subgroup analyses when these analyses were stressed by study authors and if the results explained mechanisms or illustrated how the intervention had different impacts in a specific group compared to the rest of the study population. Reducing the number of observations through subgroup analysis may affect statistical power, which we did not systematically verify.

The quantitative studies included in this review span a range of different academic disciplines, including economics, public health, and other social sciences. These fields consider different thresholds when discussing statistical significance of reported point estimates. For instance, studies in economics tend to interpret coefficients as significant when p-values were smaller than 0.10. In contrast, studies in public health generally define point estimates as significant when p-values were smaller than 0.05. When

discussing program impacts, we reported effect sizes considering effects up to the ten percent level of statistical significance.

3. Cross-Cutting Findings on Women's Agency

In this section, we provide a high-level overview that summarizes our main insights across indicators of women's agency.

Many studies show that gender norms surrounding women's agency moderated the impacts of **interventions.** While this finding is not surprising, many of the studies in this review offer empirical evidence across intervention types and outcome areas confirming what many scholars and practitioners have previously documented (Buvinic and Furst-Nichols 2014; Laszlo et al. 2017). Across most indicators of agency outlined in this review, we identified multiple examples in which interventions either failed or had limited success due to the pervasiveness of social norms related to gender. These norms were reflected in the attitudes held by both men and women about gender, household dynamics, and mobility, among others. For example, a study in Pakistan found that start-up loans and business training had limited success for female-owned enterprises due to social norms regarding the expectations that women should only operate businesses from home and have limited interactions with people outside of the household (Said et al. 2019). Women business owners in India, Ghana, and Sri Lanka who lived in households with other businesses, typically owned by men, benefited less from microcredit or business grants than women in households where they were the sole business owners (Bernhardt et al. 2019). In these households, women directed their financial resources to men's businesses rather than their own, potentially because of gender norms that expect men to earn more than women (Bernhardt et al. 2019). In addition, providing women's partners and other family members with information about the benefits and safety of women's employment did not increase female labor force participation in an Indian setting with restrictive norms about women working outside the home (Dean and Jayachandran 2019). Restrictive gender norms that dictate how key life cycle decisions are made can impede interventions from having transformative impacts. For example, an adolescent girls empowerment program in Bangladesh had no impact on the girls' age of marriage, potentially because the program did not change practices in line with the social norm that parents make decisions about their daughters' marriage (Buchmann et al. 2018).

Entrenched gender prejudices against women in public life may also limit the impact of interventions aimed to increase women's participation in politics and community decision-making. Gender quotas in India's local governments improved community attitudes about female candidates' ability to win and lead, resulting in women's greater participation in political or community decision-making (Bhavnani 2009; Beaman et al. 2009). However, one study using an RD design found that electoral results for women candidates varied by context. Electoral victories by female political leaders did not generate sustained impacts on women's subsequent political participation in areas with high levels of gender prejudice, which was proxied by the population's gender ratios (Bhalotra, Clots-Figueras, and Iyer 2018). Norms related to how women should behave in public may also prevent women from meaningfully participating in community decision-making. In Sierra Leone and the Democratic Republic of Congo, requiring women's participation in community-driven development increased women's attendance to

meetings but was not effective in changing their active participation of speaking at these meetings (Casey, Glennerster, and Miguel 2012; van der Windt, Humphreys, and Sanchez de la Sierra 2018).

Information interventions may also fail due to the stickiness of gender norms. In China, sharing information with women about voter rights increased their knowledge about voting, but voting behavior was unaffected among women in the Ningxia province, where women face heightened social restrictions (Pang, Zeng, and Rozelle 2013, 2014). Qualitative evidence suggested that social norms related to women's mobility and social stigma against women voting prevented them from acting on the knowledge they gained (Pang, Zeng, and Rozelle 2014). In Uganda, rather than highlighting new opportunities for women, an information intervention describing how women should be included in community-driven development served to drive home the point that women had been systematically excluded historically, which inadvertently further discouraged women from participating in public life (Buntaine, Daniels, and Devlin 2018).

Changing social norms related to gender, or the informal rules that impose expectations about behavior that are dependent on gender (Marcus et al. 2015b), is no small feat, with economic development, legal frameworks, and exposure to new ideas and practices often playing interconnected roles (Marcus et al. 2015a). However, changing attitudes about gender norms is possible and can lead to positive impacts on women's agency. In rural Uganda, a media campaign that featured three videos changed women's beliefs about the downside of reporting violence, which made them more likely to speak out and reduced violence against women in the community (D. P. Green, Wilke, and Cooper 2018). In rural India, depositing wages directly to women's bank accounts coupled with training led to women having more accepting attitudes about working and also reduced husbands' perceived social costs regarding their wives working (Field et al. 2019). Another study in Saudi Arabia (not formally included in this review since Saudi Arabia is not a LMIC) further supports this point. In this setting, changing married men's perceptions about other men's attitudes towards women's work had a positive impact on their wives' labor force participation (Bursztyn, González, and Yanagizawa-Drott 2018). Continuing to explore approaches that are designed to shift individual and collective gender norms is a priority for future research.

Access to financial resources alone, without addressing gender-specific constraints, was not a mechanism that consistently improved women's agency. Many economic empowerment interventions rely on the theory of change that increasing women's access to financial resources will increase their income relative to other family members. This should then translate into enhanced decision-making power and economic agency for women, along with long-term changes related to women's economic roles in the household and society. Yet, in this review, we found little evidence to support this theory of change. Consistent with previous reviews, we found that access to microcredit, savings groups, and business grants had inconsistent and often limited impacts on women's business creation, employment, and income generation (Banerjee, Duflo, Glennerster, et al. 2015; Attanasio et al. 2015; Baro et al. 2013; Ksoll et al. 2016; Karlan et al. 2017; E. P. Green et al. 2015; Angelucci, Karlan, and Zinman 2015; Bernhardt et al. 2019; Fiala 2018b). There is strong evidence that intra household dynamics play a role in explaining limited impacts for women. For example, women in Uganda who reported that their partners did not treat them well experienced no economic gains from access to a bundle of services including a business grant, while women with better relationships doubled their income (E. P. Green et al. 2015). As

outlined above, evidence from India, Ghana, and Sri Lanka indicates that women diverted resources to their spouses or other businesses in the household (Bernhardt et al. 2019), which may have explained why their businesses did not benefit from access to financial resources.

We also found that access to financial resources through jobs and employment, microcredit, and savings groups did not consistently lead to increased influence over household decisions for women (Ikenwilo et al. 2016; Angelucci, Karlan, and Zinman 2015; Said et al. 2019; Banerjee, Duflo, Glennerster, et al. 2015; Kim et al. 2009; Prillaman 2017; Karlan et al. 2017; Baro et al. 2013; Beaman, Karlan, and Thuysbaert 2014; Jensen 2012; Kotsadam and Villanger 2019; Hoffmann et al. 2017). This finding aligns with the conclusions of other reviews of microcredit and savings groups (Brody et al. 2017; Gash 2017; Vaessen et al. 2014). Out of the financial resources interventions, only transfer programs appeared to have any meaningful impact on women's decision-making, though the outcomes measured to assess decision-making are frequently associated with the conditionalities in conditional cash transfers (CCTs) and the evidence is concentrated in Latin America (Bergolo and Galván 2018; Lopez-Arana et al. 2016; Feldman et al. 2009; Handa et al. 2009). For example, one of the studies which found impacts on women's decision-making power measured decision-making through concepts related to the transfer conditionalities (e.g., children's schooling), which may not indicate improvements in women's agency (Feldman et al. 2009).

Very few studies measured the impact of access to financial resources on attitudes towards restrictive gender norms. An evaluation of unconditional cash transfers (UCTs) in Kenya did not find improvement in an index measuring attitudes around violence norms (Haushofer et al. 2019; E. P. Green et al. 2015) and one study of business trainings plus business grants found no impacts on women's attitudes towards gender norms (Haushofer et al. 2019; E. P. Green et al. 2015). Taken together, this evidence indicates that access to financial resources alone, while valuable as an approach to address disparities in resource allocation based on gender, does not consistently have transformative impacts on women's agency in employment, income generation, decision-making, or attitudes about gender norms.

However, transfers (in-kind, conditional, and unconditional) did increase agency in some domains. We found evidence that various kinds of transfers were effective in reducing IPV through increasing women's power in the home or alleviating economic stress (Hidrobo, Peterman, and Heise 2016; Roy et al. 2018; Kilburn et al. 2018; Haushofer et al. 2019) and delaying marriage and childbearing through increasing girls' education and/or alleviating economic pressure to marry girls early (Baird et al. 2010; Alam, Baez, and Carpio 2011; Buchmann et al. 2018; Baird et al. 2015; Duflo, Dupas, and Kremer 2015; Handa et al. 2015).

Programs that gave women resources were more likely to be successful in improving women's agency if they employed design features with mechanisms that gave women more control over those resources. Nonetheless, design features that enable women to hide decisions from their spouses might not offer long-term solutions to power imbalances based on gender. There is strong evidence that—rather than just providing the resources alone—program or design features with mechanisms that give women more direct control over resources such as contraceptives, savings, microcredit, or transfers can increase women's agency in household decisions, mobility, and/or contraceptive take-up. Examples of such design features include providing access to resources in private without spouses present (Ashraf,

Field, and Lee 2014), channeling resources to bank accounts in women's names (Field et al. 2019), making resources easier to protect from others through digital payments systems (Aker et al. 2016; Riley 2018), or making it costlier to access resources (Schaner 2017; Ashraf, Karlan, and Yin 2010; Dupas and Robinson 2013).

For example, offering women in Zambia private access to contraceptives increased women's contraceptive use by giving them more control to act on their fertility goals relative to women who were offered contraceptives with their partners present (Ashraf, Field, and Lee 2014). Turning to economic examples, access to commitment savings bank accounts, over which only women account holders had control and could only access funds when they reached a pre-specified amount or date, increased women's household decision-making power in the Philippines (Ashraf, Karlan, and Yin 2010). The combination of depositing wage payments directly to women's bank accounts and training women on the benefits of the accounts in India led to women's greater engagement in how to spend earnings, labor force participation, attitudes about gender roles, and mobility, especially among women who had been more constrained in their ability to work. Researchers posited that women's enhanced bargaining power stemming from control over their wage payments enabled them to push back against limiting gender norms (Field et al. 2019).

Along the same lines, distributing funds through mobile payments instead of cash increased household diet diversity, spending on children's clothing, and women's likelihood of traveling to market in an unconditional transfer program in Niger (Aker et al. 2016) and improved business outcomes for female microcredit borrowers in Uganda (Riley 2018). In both cases, researchers concluded that mobile payments offered privacy and enabled women to hide and protect their resources relative to cash. In Kenya, ATM cards for savings accounts, which were intended to increase the accessibility and reduce the costs of financial services, were not used by women with low levels of power relative to their husbands. This indicates that making it too easy to access economic resources can actually reduce women's control over these resources if power dynamics in the household are unequal (Schaner 2017).

Some of the approaches we just outlined offered women enhanced control by creating channels for women to circumvent their spouses rather than by actively changing power dynamics between men and women. The study in Zambia cited above found that offering contraceptives to women in private rather than with their partner lowered women's self-reported health and happiness, suggesting that concealing contraceptive use from the partner could have caused marital conflict (Ashraf, Field, and Lee 2014). In an evaluation in Uganda, women discussed anecdotally that businesses offer a potential pathway to increase their autonomy and agency, "but this was only possible if family members [did] not know about the true size of their business" (Fiala 2018a). They ultimately found that women who hid money from their spouses as measured in a lab-in-the-field experiment had better business outcomes than women who did not hide money. These studies indicate that sometimes women seek to gain agency through hiding information and decisions from spouses—as Kabeer describes, agency "can take the form of... deception and manipulation, subversion and resistance" (Kabeer 1999). These strategies of concealment may help women exercise agency in important ways to circumvent family members in immediate, daily decisions. However, they can be psychologically costly to women and are unlikely to fundamentally alter power dynamics based on gender. More research is needed on programs that actively seek to change power dynamics within the household.

The timing of marriage and childbearing for young women offered key margins for improvements. It seemed much more challenging to change household decision-making dynamics within a marriage—perhaps because women had more limited outside options. Like others before us, we find evidence in this review that key margins for improving agency are life cycle choices connected to when to marry and have children (Upadhyay et al. 2014; Prata et al. 2017; Kalamar, Lee-Rife, and Hindin 2016). These decisions appear to be more responsive to some economic interventions (i.e. access to employment; cash and in-kind transfers) than household decision-making after marriage. In India (Jensen 2012) and Bangladesh (Heath and Mobarak 2015), evidence suggests that access to employment led to large impacts on women's marriage and childbearing patterns. Various in-kind and cash transfer models have also been effective in changing the timing of marriage and childbearing. Cash transfers conditional on schooling were effective in delaying marriage and/or childbearing among adolescent girls in Pakistan (Alam, Baez, and Carpio 2011) and among girls who had dropped out of school in Malawi (Baird et al. 2010). UCTs were effective in delaying childbearing in Kenya (Handa et al. 2015) along with marriage and childbearing in Malawi during the duration of the program but not after (Baird et al. 2015). In-kind transfers were effective in delaying both marriage and childbearing in Bangladesh (Buchmann et al. 2018) and Kenya (Duflo, Dupas, and Kremer 2015).

Nonetheless, as outlined above, none of the approaches we reviewed, including access to employment and cash or in-kind transfer programs, consistently led to large impacts on women's household decision-making when they were studied in randomized evaluations.8 This suggests that it may be more challenging to enhance women's agency within a marriage relative to the decision to marry itself. Further research is needed to understand the reasons for this. In addition, increasing women's rights to divorce and/or the social acceptance of divorce could potentially help improve women's outside options to exit the marriage and thus influence their household decision-making power. Meanwhile, it is important to continue understanding interventions that effectively increase agency for women in a marriage or for those that choose to remain single.

While programs designed to relieve multiple constraints that women faced appeared to be effective in improving women's agency, more research is needed on which mechanisms were driving impacts and if the full packages of services were actually necessary. These programs often included elements that raised awareness of gender dynamics or developed soft/life skills. Many of the programs included in this review bundled together multiple interventions designed to improve several areas of women's and girls' lives simultaneously. For example, the intensive, multicomponent Graduation approach developed by the NGO BRAC led to sustained positive changes in income and/or consumption along with political participation or awareness among women living in extreme poverty in most contexts where it has been tested (e.g., Afghanistan, Bangladesh, Ethiopia, Ghana, India, and Pakistan)9 (Bedoya et

⁸ While there is some evidence that CCTs have improved women's household decision-making, many of the outcomes measured are related to the conditionalities of the transfers (e.g., spending on children's education), and the evidence is concentrated in Latin America (see the "household decision-making" section for more detail).

⁹ The Graduation approach had positive impacts on a broad range of outcomes in the pooled analysis across six countries (Ethiopia, Ghana, Honduras, India, Kapistan, and Peru). However, some outcomes did not improve in country-specific analysis, such as household consumption in Honduras or assets in Peru (Banerjee, Duflo, Goldberg, et al. 2015).

al. 2019; Banerjee, Duflo, Goldberg, et al. 2015; Bandiera et al. 2017). "Safe space" adolescent girl programs often bundled vocational trainings, technical trainings, empowerment/life/soft skills, and sometimes microcredit, in a setting where school-age girls could interact with peers and have exposure to a mentor. While these programs had inconsistent impacts on marriage and childbearing, there was evidence that they improved some elements of "power within," social relationships, and increased agency in economic decisions later in life (Bandiera et al. 2020, 2018; Buehren, Goldstein, et al. 2017; Buchmann et al. 2018; Scales et al. 2013; Leventhal et al. 2016; Stark, Asghar, et al. 2018; Amin et al. 2016).

There is also strong evidence that economic interventions such as microcredit, transfers, and savings groups that were coupled with trainings, discussions, or coaching that addressed gender dynamics explicitly were effective in improving women's agency by: increasing "power within" (Pronyk et al. 2006; Gupta et al. 2013; Jejeebhoy et al. 2017), enhancing freedom of movement (Buchmann et al. 2018; Jejeebhoy et al. 2017), reducing IPV (Kim et al. 2009; Ismayilova et al. 2018; Gupta et al. 2013), increasing participation in collective action (Pronyk et al. 2008), and strengthening social ties (Kim et al. 2009, 2007; Pronyk et al. 2008; Jejeebhoy et al. 2017). Other employment-focused interventions that included training to improve soft skills in communication and teamwork also improved non-economic domains of agency, such as freedom of movement (Rodella, Cuevas, and Atuesta 2015; Groh et al. 2012). Importantly, several studies demonstrated that while access to most financial services alone had limited effects on IPV or freedom of movement, integrated interventions that addressed additional constraints that women faced (e.g., changing attitudes about gender norms or increasing social networks) were effective on those measures (Buchmann et al. 2018; Kim et al. 2009; Ismayilova et al. 2018; Gupta et al. 2013; Groh et al. 2012; Roy et al. 2018; Prillaman 2017).

In our review of business trainings, we found that standardized business trainings (sometimes bundled with grants) were not consistently effective in improving women's business outcomes (Fiala 2018b; Karlan and Valdivia 2011; Giorgi, Cunha, and Calderon 2018; de Mel, McKenzie, and Woodruff 2014; Field et al. 2016). However, business trainings that developed soft skills or addressed gender-specific constraints, such as self-confidence, gender equality, and self-efficacy, tended to be effective in improving women's business outcomes in the majority of evaluations (Bulte, Lensink, and Vu 2017; Valdivia 2015; McKenzie and Puerto 2017; Alibhai et al. 2019). Many women also face social network constraints in societies that strictly regulate women's social interactions, and attending a business training with a friend helped to strengthen women's support networks and thus increased business incomes among Hindu women who faced the most caste-based social restrictions (Field et al. 2016). However, no study directly tested business trainings that addressed gender-specific constraints against a standard business training module.

Ultimately, it may not be a surprise that multicomponent programs deliver higher impacts across more areas. Across all of these interventions, it is important to interrogate whether bundling multiple components is necessary to achieve the measured impacts, and if it is, to what extent are the benefits greater than the costs of delivering multiple components. For example, researchers found that estimated benefits for households were greater than costs in six out of seven countries where the Graduation approach was implemented (Bandiera et al. 2017; Banerjee, Duflo, Goldberg, et al. 2015). Studies of interventions similar to the Graduation approach in Ghana and Uganda also suggest that the multicomponent nature was critical. Providing access to financial resources alone, such as transfers or

savings accounts, did not generate economically meaningful and cost-effective impacts in the way that the integrated packages did (Sedlmayr, Shah, and Sulaiman 2018; Banerjee, Karlan, et al. 2018). Understanding and justifying the intensity of various programs that support women's agency with cost-effectiveness data is important in estimating potential policy impact.

Some of the programs we reviewed had strong or moderately strong levels of evidence across multiple indicators of agency. These included: 1) adolescent girls' programs that enhanced soft skills as a mechanism to improve girls' self-efficacy, attitudes about gender, income generation, and ties in the community; 2) laws that mandated equality by protecting women's property rights, removing labor restrictions, or guaranteeing women's representation in political decision-making as mechanisms to improve "power within," political participation, and/or labor force participation; 3) cash and in-kind transfer programs that enhanced women's freedom from violence and marriage and childbearing agency while they were running; and 4) the Graduation approach that addressed multiple constraints extremely poor women faced to consistently increase income, consumption, assets, and political participation.

Adolescent girls' programs

Adolescent girls' programs provide various kinds of training (technical skills, soft skills, etc.) in a classroom or after-school setting. While the programs included in this review had different models and training content and were implemented in different countries, most of the programs included soft and life skills trainings focused on topics such as negotiation, persuasion, resilience, reproductive health, and long-term planning. There is strong evidence that the programs improved girls' "power within"— specifically, self-efficacy and attitudes about gender (Scales et al. 2013; Leventhal et al. 2015; Bandiera et al. 2020; Adoho et al. 2014; Baiocchi et al. 2017; Buchmann et al. 2018; Stark, Seff, et al. 2018; Amin et al. 2016; Rodella, Cuevas, and Atuesta 2015; Decker et al. 2018; Özler et al. 2020).

While the adolescent girls' programs had mixed impacts on marriage and childbearing decisions, in the majority of cases, the programs improved girls' likelihood of being employed, being engaged in incomegenerating activities, or staying in school (Bandiera et al. 2018; Amin et al. 2016; Buchmann et al. 2018; Bandiera et al. 2020; Leventhal et al. 2015; Scales et al. 2013; Adoho et al. 2014; Decker et al. 2018; Buehren, Chakravarty, et al. 2017; Buehren, Goldstein, et al. 2017). In addition, the programs increased girls' social relationships and ties in the community (Scales et al. 2013; Leventhal et al. 2015; Amin et al. 2016; Adoho et al. 2014; Bandiera et al. 2020; Stark, Asghar, et al. 2018; Decker et al. 2018; Buehren, Chakravarty, et al. 2017; Buehren, Goldstein, et al. 2017). Of course, program implementation details and context are important in achieving impacts. For example, an adolescent girls' program in Tanzania did not improve "power within," income generation, fertility preferences, or social ties, which the researchers attributed to problems with program implementation (Buehren, Goldstein, et al. 2017).

Laws that mandate equality or representation

Laws that protect women's property rights appeared to have positive impacts on women's agency in multiple areas. For example, equal inheritance property laws in India that allowed women to have shares in ancestral property that were equal to men were associated with greater educational attainment, delayed marriage, and employment for women in studies using DID designs (Bose and Das 2017; Deininger, Goyal, and Nagarajan 2010; Sapkal 2017). In addition, another study using a DID design found that expanding wives' access to marital property and removing restrictions on working outside the home in

Ethiopia were associated with improved occupational choices particularly for unmarried young women, which might be explained by better economic opportunities (Hallward-Driemeier and Gajigo 2015). A study using an RD design found that the passage of a legal reform that protected women's property rights after a divorce in China was associated with less-skewed sex-ratio among second-born children, indicating married women's greater influence over fertility decisions (Sun and Zhao 2016).10

Outside of sweeping legal reforms, there are other policy interventions related to land titling that can enhance women's property rights. A land tenure regularization program in Rwanda, which offered certificates for landholders, increased married women's land access (Ali, Deininger, and Goldstein 2014) and small price incentives in Tanzania to co-title land with women were effective in almost eliminating gender inequality in land ownership (Ali et al. 2014). In Uganda, providing subsidies for land titles that were conditional on co-titling with women or showing educational videos on the benefits of co-titling were effective in increasing demand for co-titling (Cherchi et al. 2018). Whether land titling interventions have downstream effects on other important women's agency outcomes remains a fruitful area for further research.

Gender quotas that mandate women's representation in local politics and community decision-making have sustained impacts on women's political agency, along with "power within" and agency in marriage. The electoral quotas for women in India had long-term positive impact on women's political participation and subsequent electoral results of female candidates (Beaman et al. 2009; Deininger et al. 2015; Bhavnani 2009). Importantly, these political gender quotas also increased girls' aspirations (Beaman et al. 2012), improved attitudes towards female leaders (Beaman et al. 2009; Bhavnani 2009), and reduced child marriage (Castilla 2018). In contrast, gender quotas were not as effective in changing gender norms or increasing women's participation in public life when applied to community-driven development projects (Beath, Christia, and Enikolopov 2013; Casey, Glennerster, and Miguel 2012; van der Windt, Humphreys, and Sanchez de la Sierra 2018), potentially due to the fact that these gender quotas were not backed by government-sponsored, institutional, or legal mandates (van der Windt, Humphreys, and Sanchez de la Sierra 2018).

Women's representation in the justice system may also be important. Two DID studies that examined the gradual implementation of all-women justice centers in Peru (Kavanaugh, Sviatschi, and Trako 2019) and all-women police stations in India (Amaral, Bhalotra, and Prakash 2018) found increases in women's reporting of gender-based violence cases, indicating increased confidence in the rule of law. In Peru, women living near an all-women's justice center were also more likely to make decisions jointly with their husbands (Kavanaugh, Sviatschi, and Trako 2019).

Cash and in-kind transfer programs

As referenced above, conditional and unconditional transfers to women in the form of cash or in-kind items have worked to bolster women's agency through reducing IPV or enhancing marriage and/or childbearing agency, but these effects rarely persisted after the transfers stopped. Cash, vouchers, or food transfers reduced emotional, physical, and sexual IPV in Ecuador (Hidrobo, Peterman, and Heise 2016).

¹⁰ Several other studies have examined impacts of property laws on outcomes that are beyond the scope of this review (Roy 2015; Anderson and Genicot 2015).

UCTs reduced physical violence in South Africa (Kilburn et al. 2018) and physical and sexual violence in Kenya (Haushofer et al. 2019). However, the effects of transfers alone might be limited as women in Bangladesh only experienced positive impacts when the transfers were combined with a nutrition training program (Roy et al. 2018). In addition, only higher-educated women in Ecuador experienced a reduction in emotional violence while lower-educated women who had equal or more education than their partners experienced an increase as a result of access to a cash transfer (Hidrobo and Fernald 2013; Hidrobo, Peterman, and Heise 2016). Potential mechanisms explaining the impacts of transfers on violence reduction included alleviating poverty-related stress and changing women's tolerance for violence. While these results are promising, it is important to note that results may differ according to context, with few studies analyzing impacts in conflict or humanitarian settings. Average program effects also mask increases in violence that individual women or subgroups of women might encounter. In addition, there is little evidence on transfers leading to long-term reductions in IPV.

Conditional and unconditional transfers to women in the form of cash, vouchers, and/or food also led to girls' enhanced agency in marriage and childbearing. A cash transfer program conditional on girls' school attendance was effective in delaying marriage in Pakistan (Alam, Baez, and Carpio 2011), while a cash transfer program in Malawi conditional on schooling was only effective among girls who were out of school at baseline (Baird et al. 2010). In addition, unconditional transfers reduced marriage and childbearing while they were in place in Malawi (Baird et al. 2015) and reduced pregnancy among vulnerable children in Kenya (Handa et al. 2015). Similarly, an in-kind transfer program that provided girls with school uniforms reduced marriage and childbearing in Kenya (Duflo, Dupas, and Kremer 2015). Another in-kind transfer program reduced child marriage while it was in place in Bangladesh (Buchmann et al. 2018). Two important mechanisms that explained these impacts included prolonging girls' education and reducing family financial pressures that may have led to marriage or dropping out of school.

Graduation approach

The Graduation approach is an intensive, multifaceted intervention originally developed by the NGO BRAC that often provides a productive asset, consumption assistance, skills training, savings, and/or mentorship over a limited period of time. This program led to sustained positive changes in income, consumption, and mental health along with large changes in household assets two years after the asset transfer in Afghanistan; three years after the asset transfer in the pooled analysis from Ethiopia, Ghana, Honduras, India, Pakistan, and Perun; and four years after the asset transfer in Bangladesh (Bandiera et al. 2017; Banerjee, Duflo, Goldberg, et al. 2015; Bedoya et al. 2019). The intervention also increased women's political participation or awareness across all countries in the pooled analysis (but not in Honduras and Peru in the country-specific analyses). Nonetheless, there were no long-term impacts on women's household decision-making (Bandiera et al. 2017; Banerjee, Duflo, Goldberg, et al. 2015; Bedoya et al. 2019).

¹¹ In the second endline data collection for the country-specific analysis, income was higher in every country, household consumption was higher in every country but Honduras, and assets were greater in every country but Honduras and Peru (assets actually decreased in Honduras) (Banerjee, Duflo, Goldberg, et al. 2015).

More research is needed on programs that are specifically designed to shift individual and collective gender norms, including mass media interventions. As outlined above, many programs included in this review that target women focus on satisfying women's daily needs through access to services or resources without explicitly addressing underlying power imbalances based on gender. Yet, this review identifies several areas in which incorporating intentional gender awareness programming that directly challenged restrictive gender norms through discussion groups and training seemed promising, including to: reduce IPV (Kim et al. 2009; Ismayilova et al. 2018; Gupta et al. 2013), increase business profits (Bulte, Lensink, and Vu 2017; Valdivia 2015; McKenzie and Puerto 2017; Alibhai et al. 2019), and expand adolescent girls' agency in economic decisions and/or enhance their "power within" (Bandiera et al. 2020, 2018; Buehren, Goldstein, et al. 2017; Leventhal et al. 2016; Scales et al. 2013; Buchmann et al. 2018; Stark, Asghar, et al. 2018; Amin et al. 2016). Nonetheless, additional research that more clearly evaluates mechanisms, tests gender awareness programs against other training models, identifies effective bundling and dosage, and evaluates long-run impacts would strengthen our ability to recommend this approach.

In addition, limited evidence suggests that mass media interventions can shift attitudes about IPV (Banerjee, La Ferrara, and Orozco 2019; D. P. Green, Wilke, and Cooper 2018; Lecoutere, Spielman, and Van Campenhout 2019) and reduce fertility through soap operas portraying small families in Brazil (Ferrara, Chong, and Duryea 2012). Since mass media interventions can be scaled at relatively low costs, more research is needed about how to use mass media to shift individual attitudes and collective gender norms more broadly.

4. Direct Indicators of Agency

In this section, we summarize the evidence from studies that measure outcomes that fall within each of the direct indicators of agency included in this review. We define direct indicators of agency as outcomes that are fundamental to a woman's ability to make choices and act on them. While these outcomes may not constitute agency alone, we consider them key signals of a woman's ability to be an agent. We identify four categories of outcomes that are direct indicators of agency. These include:

| Direct indicators | Definitions |
|-------------------------------|---|
| "Power within" | Internal belief in one's worth and ability (Kabeer 1999), measured through aspirations, self-efficacy, and attitudes about gender norms. Related to a woman's belief in her ability to set goals and act on them (Donald et al. 2017), some of these measures are considered subjective and focus on women's own perceptions of agency (Quisumbing, Rubin, and Sproule 2016). |
| Household decision- making | Women's participation in household decisions on a range of topics (e.g., spending money, visiting family/friends, health care for themselves and their children, etc.). |
| Freedom of movement | A woman's ability to choose where to go and when, a key manifestation of agency. |

| Freedom from violence | A woman's ability to live free of emotional, physical, or sexual violence, which embody an extreme limitation of a woman's agency. Measured through experiences of intimate partner violence (IPV) or violence against adolescent girls. |
|-----------------------|--|
| | of violence against adolescent girls. |

4.1. "Power within"

Kabeer (1999) argues that women's agency can manifest in intangible, cognitive processes that determine the meaning, motivation, and purpose that individuals bring to a specific activity or decision. Broadly, "power within" can be understood as the internal, psychological changes that enable women and girls to exercise agency. "Power within" generally consists of elements that can either facilitate or impose internal constraints on women's agency, rather than come from external sources. For example, according to a World Bank report, four in five women around the world believe gender-based violence is justified under certain circumstances (Klugman et al. 2014). Approximately 30 percent of women around the world believe that it is problematic if a woman earns more than her husband (World Values Survey 2014). Lower aspirations related to work may also result in low rates of educational attainment and labor force participation. In India, where, according to the World Values Survey (World Values Survey 2014), 43.4 percent of women agree that men should have more right to a job than women, men are three times as likely as women to be working (Jayachandran 2015). Unequal gender norms or restrictive attitudes related to gender may also lead to lower aspirations and achievements among women. For instance, a study in India found that gender priming, or reminding individuals about gender norms in their community, negatively impacted girls' aspirations related to education (Mukherjee 2017).

In this review, we consider elements of "power within" to be direct indicators of agency, since they are closely related to the fundamental definition of agency, which has to do with women's ability to make meaningful choices and act upon them. In this section, we focus on evaluations that measure the impact of programs on aspirations, self-efficacy, and attitudes towards gender norms.

Aspirations: We define aspirations as the goals or ambitions women and girls have for their own lives. Here, we include goals related to education, employment, and careers, as well as those related to life cycle choices such as marriage and childbearing. Lower aspirations may stymie women and girls' efforts to attain desired outcomes and diminish their ability to set goals and work towards achieving them.

Self-efficacy: Self-efficacy is interpreted as women's and girls' confidence in their ability to achieve the goals they set for themselves. A large body of literature in psychology argues that low levels of generalized self-efficacy, which is defined as the belief in one's own ability to achieve goals, can inhibit women from exerting effort to achieve the outcomes they desire (Mckelway 2018). Low levels of self-efficacy may result in reduced labor market participation among women, further inhibiting women's access to resources.

Attitudes towards gender norms: Social and cultural norms related to gender roles impact women's lives in several ways. In many parts of the world, gender-related norms have contributed to favoritism towards boys, leading to poorer health and well-being for girls and skewed sex ratios (Jayachandran 2015). Thus, changing attitudes towards gender norms is crucial to improving women's agency and

empowerment. Since this review excludes studies that are not explicitly targeted towards women, our discussion of attitudes towards gender norms focuses largely on the attitudes of women who participated in the programs. However, men's attitudes towards women can also affect women's agency.

Psychological measures of agency may include other categories, such as psychological stress, depression, perceived sense of agency, and others. Some of these measures might be considered subjective, aiming to quantify women's own perceptions of agency (Quisumbing, Rubin, and Sproule 2016). For this review, we chose to focus on the three outcomes listed above since they were frequently measured in the included studies. Researchers used several methods to measure these elements of "power within." A common approach was to construct indices based on participants' responses to, or agreement with, statements related to aspirations, self-efficacy, and attitudes towards norms. Some studies used standardized psychological scales to measure elements of "power within." For instance, multiple studies that measured self-efficacy used the Generalized Self Efficacy Scale. Several studies considered indicators of "power within" as intermediate outcomes on the pathway to achieving other outcomes. For instance, improvements in self-efficacy or attitudes towards gender norms can be conceptualized as a mediator for employment-related outcomes. Where appropriate, we highlight how elements of "power within" were conceptualized and evaluated as a mechanism leading to changes in other downstream indicators of women's agency.

In most cases, programs that aimed to improve elements of "power within" included trainings that encouraged soft skills acquisition among women and girls. These were often combined with economic interventions, such as job opportunities, business and vocational trainings, or microfinance. However, even within a particular intervention type, "power within" was not consistently measured across all evaluations. As a result, our takeaways are based on the subset of 57 studies that measured and reported impacts on "power within" as an intermediate or final outcome.

Main Takeaways:

- There is strong evidence that adolescent girls' programs that included soft and life skills training, sometimes bundled with other interventions, improved self-efficacy, confidence, and attitudes towards gender norms but did not consistently improve girls' aspirations related to marriage, childbearing, education, and jobs. This suggests that soft skills acquisition may be a key mechanism through which self-efficacy and gender attitudes among adolescents can be influenced.
- The evidence on the impact of vocational and business training programs on "power within" is mixed, but programs that included psychological or agency-related modules had consistent impacts on women's self-efficacy. Microcredit and savings groups with complementary gender or health related trainings didn't consistently lead to positive impacts on "power within" but were more successful when they implemented a greater number of gender-focused sessions or had high attendance.
- Evidence from India suggests that increasing women's access to economic and political
 opportunities outside of the home, through gender quotas, access to jobs, or increased control
 over earnings improved multiple elements of "power within." However, a small number of
 studies indicate that similar approaches were not effective in other contexts in sub-Saharan Africa
 with similarly restrictive gender norms.

 Limited evidence suggests that exposure to mass media programs tailored towards raising awareness on gender-based violence improved attitudes about gender norms related to genderbased violence.

There is strong evidence that programs for adolescent girls that included soft and life skills training components, sometimes bundled with other interventions, improved various measures of selfefficacy, confidence, and attitudes towards gender norms but did not consistently improve girls' aspirations related to marriage, childbearing, education, and jobs. This suggests that soft skills acquisition may be a key mechanism through which self-efficacy and gender attitudes among adolescents can be influenced. Seven adolescent girls' programs measured outcomes related to selfefficacy and confidence and six found positive impacts (Baiocchi et al. 2017; Leventhal et al. 2016; Scales et al. 2013; Adoho et al. 2014; Bandiera et al. 2018; Rodella, Cuevas, and Atuesta 2015; Decker et al. 2018). Similarly, six out of seven studies that measured adolescents' attitudes towards various gender norms found positive impacts (Dhar, Jain, and Jayachandran 2018; Leventhal et al. 2016; Stark, Asghar, et al. 2018; Buchmann et al. 2018; Amin et al. 2016; Buehren, Chakravarty, et al. 2017; Özler et al. 2020). Contrastingly, out of the five studies that measured outcomes related to aspirations, only two found positive impacts (Buehren, Chakravarty, et al. 2017; Buehren, Goldstein, et al. 2017; Rodella, Cuevas, and Atuesta 2015; Bandiera et al. 2020). In one case, the midline survey found impacts on aspirations, but these impacts almost completely faded away at endline (Bandiera et al. 2020). Most of these adolescent girls' programs bundled interventions and, among other things, enabled soft skills acquisition. Soft skills acquisition, thus, appears to be a mechanism through which "power within" can be increased among adolescent girls.

Two studies evaluated programs that combined empowerment, gender training, and self-defense components to address IPV among adolescents. In Kenya, this intervention increased self-efficacy, measured on the generalized self-efficacy scale, by 0.19 points from a baseline average of 3.1 points (Baiocchi et al. 2017). Researchers discussed self-efficacy as an essential intermediary outcome on the pathway to reducing sexual assault. However, in Malawi, the same intervention did not appear to impact self-efficacy (Decker et al. 2018). In this case, researchers noted that issues related to assessing self-confidence among girls may have inhibited the detection of effects.

Three interventions that included soft skills components had positive impacts on measures of "power within" among adolescent girls in South Asia. In India, a psychosocial intervention that consisted of a resilience curriculum and soft skills training had positive impacts on adolescent girls' resilience and self-efficacy and a marginally significant effect on girls' attitudes towards gender norms (Leventhal et al. 2015). When combined with a physical health intervention, the soft skills training program had a greater effect on gender attitudes (Leventhal et al. 2016). In Bangladesh, a six-month empowerment program with the objective of reducing child marriage and increasing girls' education had long term impacts on gender attitudes among younger girls between ages 10-17 (Buchmann et al. 2018). Bundling the training program with an in-kind incentive conditional on delayed marriage did not produce additional impacts on gender attitudes. Another intervention aimed at delaying marriage in Bangladesh, which consisted of soft skills and livelihoods training, positively impacted girls' attitudes about refusing arranged marriages and tolerance of gender-based violence (Amin et al. 2016). Interestingly, the livelihoods skills training component had the largest positive impacts, compared to the soft skills components.

Three studies showed that empowerment training to promote gender equality or life skills training to prevent gender-based violence had positive effects on girls' attitudes towards gender norms. The Girl Empower program, which provided life skills training through safe space to girls aged 13-14 in Liberia, improved girls' attitudes about gender equity and IPV. However, the program did not reduce actual sexual violence, perhaps because it did not affect other protective factors against violence such as girls' social capital, caregivers' gender attitudes, or caregivers' aspirations for their daughters (Özler et al. 2020). In refugee camps in Ethiopia, a safe space and life skills training program to combat IPV improved adolescent girls' attitudes about gender norms about the appropriate age for marriage and having children (Stark, Asghar, et al. 2018). In India, a school-based program to promote awareness on gender-based discrimination led to a large improvement of 0.25 standard deviations in a gender attitudes index among girls and boys between grades seven and ten (Dhar, Jain, and Jayachandran 2018). However, the program failed to positively affect adolescent girls' aspirations related to education and jobs, perhaps because aspirations among girls in the comparison group were already high and comparable to boys' aspirations prior to the launch of the program (Dhar, Jain, and Jayachandran 2018).

Empowerment and Livelihood for Adolescents (ELA) is a program (known as the Adolescent Girls Initiatives in South Sudan) implemented by the organization BRAC that seeks to empower adolescent girls along multiple dimensions (Bandiera, Buehren, Burgess, et al. 2018). The program provides vocational and life skills training in a safe space setting, where girls could meet and socialize with peers. The impacts of this program have been studied in several contexts, including Uganda, Sierra Leone, South Sudan, and Tanzania. In areas of Sierra Leone undisrupted by Ebola, the ELA program led to modest improvements in some measures of human capital, including entrepreneurial confidence, for older girls (ages 18-25) (Bandiera et al. 2018).

Contrastingly, the Adolescent Girls Initiative in South Sudan had a statistically significant negative effect on the gender roles index, with unclear reasons why (Buehren, Chakravarty, et al. 2017). While this program did not discourage girls from going to school, despite encouraging participation in incomegenerating activities, it failed to increase girls' desire to start or return to school, if they had never attended or dropped out (Buehren, Chakravarty, et al. 2017). In Uganda, the impact of the ELA program on several measures of aspirations and attitudes towards gender norms were short-lived and faded by endline. Researchers showed that, at midline, life skills acquisition played a more important role in influencing all these dimensions of "power within" relative to other program components (Bandiera et al. 2020). In Tanzania, the ELA program did not seem to impact aspirations-related outcomes such as girls' perceived ideal age for marriage and ideal number of children. Researchers noted that a lack of implementation fidelity might explain the failure of the program to impact most outcomes in Tanzania (Buehren, Goldstein, et al. 2017).

Two studies evaluated programs for adolescents that combined technical and soft skills training, with an emphasis on employment. In Liberia, a hard and soft skills training did not impact girls' ability to self-regulate, but improved some measures of self-confidence, including girls' confidence in their own abilities, self-reliance, and social skills (Adoho et al. 2014). In Haiti, a similar program led to improvements in self-efficacy, confidence, and aspirations among adolescent girls. The improvement in aspirations manifested in increased enrollment in further education (Rodella, Cuevas, and Atuesta 2015).

In Zimbabwe, a program that provided students with school supplies and mentorship to help keep adolescent orphan girls in school led to improvements in adolescent girls' beliefs about whether they could complete school and made them more likely to endorse gender equity (Hallfors et al. 2011).

In Zambia, a study of an after-school training program for adolescent girls which did not measure "power within" directly found that the "aspirations effect" resulting from providing adolescent girls a safe space with a role model did not lead to improvements in human capital investment. While the negotiation training had significant effects on investment in education, researchers could not statistically reject that the safe space and negotiation treatments had the same positive effect on the average girl (Ashraf et al. 2020).

The evidence on the impact of vocational and business training programs on "power within" is mixed, but programs that included psychological or agency-related modules had consistent impacts on women's self-efficacy. Three out of five training programs aiming to increase employment and entrepreneurship among women impacted women's self-efficacy (Alibhai et al. 2019; Mckelway 2018; de Azevedo, Davis, and Charles 2013; Valdivia 2015; McKenzie and Puerto 2017; Field et al. 2016). Two of the three programs that impacted self-efficacy included training components that focused on psychosocial skills, while the third had a life skills component with modules about emotional control, personal motivation, etc. (Alibhai et al. 2019; Mckelway 2018; de Azevedo, Davis, and Charles 2013). In Ethiopia, a youth-led psychological business training intervention led to improvements in personal initiative and self-efficacy, which faded two years after the study (Alibhai et al. 2019). This study also evaluates a similar program in an alternate context in the same country, which failed to produce impacts on personal initiative and self-efficacy, perhaps due to differences in the mode of delivery (Alibhai et al. 2019). Similarly, in India, a psychosocial training program produced large effects on generalized self-efficacy and employment (Mckelway 2018). When combined with job offers to women, self-efficacy was further increased.

In Kenya, a technical and life skills training program, which also provided women internships and job placement support, found increases in self-reported confidence among young women, which were higher among participants who received the life skills training in addition to all other components (de Azevedo, Davis, and Charles 2013). The importance of agency-related psychological programming is also emphasized in the evaluation of agency-based business training program in Kenya for cookstove entrepreneurs (Shankar, Onyura, and Alderman 2015). Although the researchers did not measure impacts on self-efficacy, the agency-based training led to large improvements in sales, especially for women, indicating that targeting elements of "power within" in programs can lead to positive outcomes for women.

Two business training programs, however, did not find impacts on self-efficacy. One program in Kenya, which included programming related to gender and entrepreneurship, failed to improve measures of entrepreneurial self-efficacy among women (McKenzie and Puerto 2017). Another light-touch program in India, which provided women customers of a bank business counselling for two days and did not include extensive life skills training, did not impact women's confidence (Field et al. 2016).

Microcredit and savings groups with complementary gender- or health-related trainings didn't consistently lead to positive impacts on "power within" but were more successful when they

implemented a greater number of gender-focused sessions or had high attendance. Several financial interventions were combined with complementary programming related to gender in order to produce impacts on elements of "power within." Elements of "power within" were not consistently measured in studies of financial interventions that did not also have program components aiming to improve elements of "power within." Programs that impacted "power within" generally had a greater number of genderrelated content sessions (Jejeebhoy et al. 2017; Gupta et al. 2013; Subramanyam et al. 2017; Pronyk et al. 2008) or had impacts only on participants who regularly attended training sessions (Gupta et al. 2013). An SHG in India, which contained 24 learning sessions that challenged gender roles, led to improvements in gender attitudes (Jejeebhoy et al. 2017). Along similar lines, a study of the Gram Varta program in India, which contained twenty participatory health education sessions implemented in SHGs, had impacts on women's self-confidence in refusing sexual intercourse and demanding a condom (Subramanyam et al. 2017). In Côte d'Ivoire, a savings group program containing a gender dialogue component impacted gender attitudes, but these impacts were limited to participants who had high program attendance (Gupta et al. 2013). Among microcredit programs, one program in South Africa, which included ten one-hour training sessions on HIV and gender equity, changed women's attitudes towards more progressive gender norms (Pronyk et al. 2006).

Meanwhile, programs that did not find impacts on "power within" generally consisted of fewer sessions (Ismayilova et al. 2018; Holden et al. 2016; Karlan, Thuysbaert, and Gray 2017). Two studies that measured savings group interventions with fewer training sessions on health knowledge or gender-based violence did not find impacts on attitudes towards gender norms (Ismayilova et al. 2018; Holden et al. 2016). In Burkina Faso, a program consisting of five sessions of family coaching did not change beliefs about gender equality (Ismayilova et al. 2018). In India, an intervention that added six sessions of training on violence against women to SHGs did not improve attitudes related to violence against women in public spaces (Holden et al. 2016). Further, an evaluation in Benin, which tested the impact of offering six to eight sessions of a health education program, in addition to a microcredit intervention, did not find impacts on attitudes towards gender norms among participants, even when the gender composition of the groups were varied (Karlan, Thuysbaert, and Gray 2017). In Mexico, a soft skills training program consisting of four sessions focused on hope raised the aspirations of indigenous women with access to microcredit one month after the training, but did not have a statistically significant effect on self-efficacy or on women's self-reported ability to influence their own future (Lybbert and Wydick 2016).

Finally, only one study of an SHG program in India that did not include gender-related training components measured changes in "power within." Using an RD design, the study found that the SHG program, which combined savings and microfinance components, increased women's self-reported confidence and changed women's political gender biases, but the program did not have an impact on various measures of women's attitudes towards gender roles (Prillaman 2017).

The evidence on the impact of cash and in-kind transfers on elements of "power within" was limited and mixed. Four studies measured the impact of cash transfers on elements of "power within," while three measured the impact of multicomponent interventions that included cash or in-kind transfers. In both sets of studies, impacts on "power within" were mixed. In Kenya, a UCT program targeted towards women reduced physical and sexual IPV but had no effect on an index capturing women's attitudes towards violence nor on their opinion on whether women should tolerate being beaten

(Haushofer et al. 2019). The program led to impacts on only one out of seven questions measuring attitudes towards wife beating (Haushofer et al. 2019).

Contrastingly, another study which used an instrumental variables approach to measure a CCT program in Mexico found positive impacts on the assimilation of women's rights, measured through women's responses to a question asking if they felt more "rightful" (Balmori de la Miyar 2018). Further, this program increased the reporting rates of violence against women. Two studies measured the impact of cash and in-kind transfers or business grants on self-efficacy, and one of the two found impacts. In Ecuador, a six-month food transfer program, which was targeted to women in low-income households and aimed at decreasing IPV, increased women's self-confidence, which led to further reductions in IPV (Buller et al. 2016). The program provided women with food transfers or vouchers worth US\$40 once a month over a six-month period. The second study found that providing grants to microenterprise owners in Sri Lanka did not lead to improvements in measures of ability and motivation, including self-efficacy and achievement motivation. Some recipients were provided a cash grant, while others received an in-kind transfer (de Mel, McKenzie, and Woodruff 2014).

Two out of three studies of multicomponent interventions, which combined cash transfers, in-kind transfers, or business grants with other program components, impacted "power within." A multicomponent cash and asset transfer intervention in Uganda, which included a microenterprise training program and a light touch psychological intervention, improved a psychological outlook index, which included elements of aspirations and self-efficacy (Sedlmayr, Shah, and Sulaiman 2018). Similarly, the Graduation approach in Afghanistan led to increases in a women's empowerment index, which included a measure for women's aspirations for their daughters (Bedoya et al. 2019). However, in Uganda, a poverty alleviation program consisting of five-day business training, a US\$150 grant, and supervision did not change women's attitudes towards gender norms, despite increasing women's earnings. Adding an additional gender- and IPV-related training component, which women attended with their partners, also did not lead to impacts on women's attitudes towards gender norms (E. P. Green et al. 2015).

Evidence from India suggests that increasing women's access to economic and political opportunities outside of the home through gender quotas, access to jobs, or increased control over earnings improved multiple elements of "power within." However, a small number of studies indicate that these approaches were not effective in other contexts in sub-Saharan Africa with similarly restrictive gender norms. Two studies from India found that interventions that improved access to jobs led to substantial improvements in aspirations and self-efficacy among women. An intervention in India, which connected people living in villages to experienced recruiters in order to increase awareness of and access to jobs, improved women's aspirations (Jensen 2012). The program led to large increases in the percentage of women wanting to work more over the course of their lives. Similarly, another intervention in India found that randomly offering jobs to women produced a large, positive effect of 0.2 standard deviations on generalized self-efficacy for women who received job offers (Mckelway 2018). The program randomly offered jobs to women who participated in a self-efficacy intervention first. Thus, the job offer program increased self-efficacy among women who already had high levels of generalized self-efficacy.

The evidence on whether programs that increase access to employment through job offers or vouchers impact attitudes towards gender norms in other contexts is limited. In Ethiopia, offering women jobs to

increase employment and reduce IPV did not improve most measures of attitudes towards gender equality (Kotsadam and Villanger 2019). In Jordan, providing female high school graduates with a job voucher and/or business training did not significantly impact participants' attitudes towards women's role in home and society (Groh et al. 2012). Researchers noted that the program may have failed to impact attitudes partly due to high agreement among students on some measures of gender attitudes prior to program implementation.

One study showed that increasing women's control over their earnings had positive impacts on "power within" in India. When wages from a public workfare program were deposited into women's own bank accounts, gender norms became more liberal in the long run and these effects were concentrated among households with more restrictive gender norms (Field et al. 2019). Researchers found that increasing women's control over their income improved women's attitudes towards gender norms by 0.11 standard deviations. While men's gender attitudes remained unchanged, their acceptance of women in the community working significantly increased (Field et al. 2019).

Similarly, increasing women's political opportunities outside the home through gender quotas has been shown to have positive impacts on "power within" in India. One study found that gender quotas for women in leadership positions impacted aspirations among adolescent girls (Beaman et al. 2012). The aspirations effect may have been a result of the role model effect of female leaders and women-friendly policies enacted by them. Further, gender quotas also increased parental aspirations for their daughters (Beaman et al. 2012). Additionally, two studies suggest that gender quotas for political office in India changed attitudes towards the effectiveness of women leaders and their ability to win elections. One study found that gender quotas weakened implicit biases and stereotypes about gender roles and improved male villagers' perception of female leaders. However, political preferences among women were unaltered (Beaman et al. 2009). Another study in India found that gender quotas increased electoral chances for women by allowing political parties to update their biases about whether women can win elections (Bhavnani, 2009).

Outside of India, it is unclear whether gender quotas in leadership positions for development programs can influence entrenched attitudes about gender roles. A study in Afghanistan found that mandating women's participation in development projects did not change entrenched attitudes related to women's role in society. However, the program improved attitudes towards women's involvement in local governance by 0.04 standard deviations for women and 0.07 standard deviations for men (Beath, Christia, and Enikolopov 2013). Gender quotas for participation in community-driven development projects in Sierra Leone and the Democratic Republic of Congo, however, did not affect attitudes towards women leaders or the role of women in the community (Casey et al, 2012, Van der Windt et al, 2018).

Limited evidence suggests that exposure to mass media programs tailored towards raising awareness of gender-based violence improved attitudes about gender norms related to gender-based violence. Two studies found that exposure to content that encouraged positive attitudes towards domestic violence led to improvements in attitudes about the disclosure of domestic violence and its acceptability. A mass media program in Uganda featuring three short videos that encouraged reporting violence against women reduced women's beliefs that they would face social repercussions for reporting incidents of violence against women by 18 percent, from a comparison group average of 63 percent (D. P. Green, Wilke, and Cooper 2018). This change in attitudes served as a mechanism for substantial reduction

in violence against women over a six-month period following the campaign. In Nigeria, a more intensive mass media program, which altered the content of an entertainment television series to promote positive attitudes towards HIV and domestic violence, reduced men's probability of justifying domestic violence, but had no impacts on women's attitudes towards domestic violence (Banerjee, La Ferrara, and Orozco 2019).

Two studies, each testing a different kind of intervention, measured impacts on gendered attitudes towards land ownership and use, and one found impacts. In Burkina Faso, an agriculture and nutrition program which integrated agricultural production training, access to productive assets, and health education impacted attitudes towards land ownership and use (van den Bold et al. 2015). In Tanzania, a community-based legal aid and education program did not affect attitudes towards gendered land practices (Mueller et al. 2017). While the program increased women's legal knowledge and gave them more exposure to legal services, it did not shift women's attitudes or result in more favorable gendered land practices.

Future Research

Broadly, more research is needed to understand key levers for generating social norms change at the individual and community level. There is a need to understand the process of norms change related to gender and how tipping points can be brought about to shift the existing consensus around gender norms in communities. Further, research is needed to understand what elements of "power within" are best targeted at different stages of a woman's life cycle. For instance, improving aspirations may be more effective at earlier stages in a woman's life compared to self-efficacy. There is also a need to better understand to what extent individuals act on their own privately held beliefs versus conforming to perceptions of others' beliefs and to test various interventions accordingly. Further, understanding how to address implicit versus explicit bias requires additional research.

While a small group of studies indicate that mass media interventions can be effective in improving attitudes related to gender-based violence, more research is needed to understand how mass media can be effectively leveraged as a tool to influence other attitudes about gender norms (Banerjee, La Ferrara, and Orozco 2019; D. P. Green, Wilke, and Cooper 2018). Further, research is needed to determine what types and levels of information are more likely to influence attitudes towards gender norms in a cost-effective and scalable manner (e.g., when updating people about others' attitudes, will they respond to national statistics, or information about peers and neighbors? How might this compare to using stories?).

More research is additionally needed to determine the directionality of the relationship between "power within" and women's economic empowerment. For example, does access to economic opportunities increase "power within," and do increases in "power within," in turn, lead to economic empowerment? Additionally, the role of adding psychological or agency related training components to economic interventions in increasing elements of "power within" needs to be explored further. Finally, more research is needed to understand how elements of "power within" can be measured more accurately, including addressing reporting bias and understanding how to modify standard psychometric questions developed in high-income countries to LMIC contexts.

4.2. Household decision-making

Women's ability to make or participate in household decisions is an essential dimension of agency and a key pathway for achieving women's empowerment in social, economic, and political domains. Around the world, women are often denied decision-making power at home due to gender-based hierarchical power dynamics, lack of access to resources, and discriminatory social norms. Based on the Demographic and Health Survey data from 54 LMICs, only 58 percent of women have the final say on large household purchases either alone or jointly with their husband or another person (Hanmer and Klugman 2016). In addition, only 57 percent of women aged 15-49 years old make their own decisions about sexual relations and use of contraceptives and reproductive health services, according to data from 51 countries (United Nations 2019a). The lack of decision-making power can prevent women and girls from acting on their goals. As such, we consider household decision-making to be a direct indicator of women's agency.

Women's participation in household decision-making is the most common indicator of agency in the papers included in this review. Given finite resources within a household and differing preferences among household members, women's ability to negotiate how resources are allocated indicates their relative power within the household in relation to others, especially their male partners. Household decisions range from economic decisions such as spending on food and health care to social decisions such as children's education and marriage. Studies often measure women's role in household decision-making directly by asking about women's participation in these various categories, relying on women's self-reported information and constructing an aggregate measure using a summary score or factor analysis. However, such survey questions on decision-making roles within the household might be subject to reporting bias, do not capture the role of negotiation in the decision-making process, and typically only rely on women's reports (Donald et al. 2017; Diaz-Martin, Glennerster, and Walsh 2018). More recently, non-survey instruments, such as lab-in-the-field games where both spouses are invited to participate, are increasingly used to measure relative decision-making power within the household. We discuss measurement issues more in the "Measuring women's agency" section at the end.

Interventions can influence women's decision-making power in a number of ways. For instance, business or vocational skills training may place women in a more advantageous position in the labor market, which in turn could give them more power to negotiate with other household members. Similarly, economic interventions such as microfinance or transfers might shift women's relative economic standing in the household through better access to financial resources, which in turn might improve a range of other empowerment-related outcomes. Soft skills training that develop negotiation skills, change attitudes about gender norms, or build confidence in women and girls may directly motivate them to engage more in the household decision-making processes. However, household decision-making dynamics might not respond to these and other interventions due to entrenched social norms that dictate women's role in the family. In addition, men might be resistant to changes in family relations or lash out against change even if interventions are effective in empowering women. Further, changing household dynamics is a process that takes time and is often difficult to capture with existing measures of decision-making power.

In this section, we review 49 papers that measure the impacts of interventions that provide skills training, microcredit, savings, transfers, and employment opportunities on women's decision-making power in the household.

Main takeaways

- Economic interventions, including microcredit, savings, unconditional transfers, and
 multicomponent poverty alleviation programs (e.g., the Graduation approach), did not have
 transformative impacts on women's household decision-making power. This suggests that
 increasing women's access to financial resources alone might not be an effective mechanism to
 change household decision-making dynamics.
- The only economic intervention that consistently showed some effects on household decisionmaking was CCTs. However, the outcomes measured to assess decision-making were often associated with the conditionalities in CCTs and the evidence was concentrated in Latin America.
- Enhancing women's control over financial resources through design features in microcredit or transfer programs may be a mechanism that led to positive impacts on women's agency, some of which might not be captured by conventional decision-making questions.
- A limited number of studies found that vocational training programs for adolescent girls that
 emphasized both soft and hard skills, coupled with employment support, increased young
 women's autonomy in personal decisions. In contrast, interventions that offered business training
 alone or employment opportunities for older women did not automatically enhance women's role
 in household decision-making.
- There is limited evidence that property rights laws and enhancing the justice system's capacity to
 address domestic violence improved women's influence over family decisions. Enforcing
 women's rights in the household through institutional approaches might be a promising
 mechanism.

The evidence was mixed on whether access to financial services through individual- or group-based microcredit programs enhanced women's decision-making power in the household. This aligns with the findings from a systematic review which concluded that there was no evidence that microcredit had an effect on women's control over household spending (Vaessen et al. 2014). Two studies found that access to microcredit programs increased women's participation in household decision-making in Mexico and Nigeria (Angelucci, Karlan, and Zinman 2015; Ikenwilo et al. 2016). In Mexico, a group liability microcredit program increased the number of household issues a woman had a say on and women's participation in financial decisions (Angelucci, Karlan, and Zinman 2015). A study using an RD design found that beneficiaries of a rural microcredit program in Nigeria had greater capacity to make joint decisions in the household compared to those who fell below the eligibility threshold (Ikenwilo et al. 2016). Meanwhile, three other studies in Pakistan, India, and South Africa showed that microcredit did not have a lasting effect on women's autonomy in household decision-making (Said et al. 2019; Banerjee, Duflo, Glennerster, et al. 2015; Kim et al. 2009).

Similarly, women's group models such as women's SHGs or VSLAs did not consistently have positive impacts on women's decision-making power in the household. Two studies on savings groups found positive impacts on women's household decision-making power, including women's SHGs in India that offered credit and savings and VSLAs in Ghana, Malawi, and Uganda (Prillaman 2017; Karlan et al.

2017). However, a different study of SHGs in India and another of savings groups in Mali did not identify positive impacts on women's decision-making power in the household (Baro et al. 2013; Beaman, Karlan, and Thuysbaert 2014; Hoffmann et al. 2017).

While we did not identify any clear patterns in the mixed evidence, a previous review suggests that the delivery method and context-specific gender relations determine whether microcredit has the potential to increase women's decision-making power and control over resources in the household (Vaessen et al. 2014). This finding may be relevant for other financial services such as savings accounts. A commitment savings product in the Philippines only allowed the account owner to withdraw deposits after a prespecified goal was reached. The offer to open such an account increased women's decision-making power by 0.14 and 0.25 standard deviations, measured by two indices that either equally weighted nine decision categories (including purchases, spending, number of children, schooling of children, and family planning) or were constructed using factor analyses. In particular, the effects were driven by women who had relatively low decision-making power at baseline, consistent with the hypothesis that initially disempowered women would benefit more from increased financial savings and control over committed assets (Ashraf, Karlan, and Yin 2010).

Similarly, economic interventions that integrated training/mentorship components did not consistently increase women's household decision-making power in sub-Saharan Africa. One study on a five-day business training program that provided a one-time grant and ongoing mentoring in Uganda increased women's influence over household purchases (E. P. Green et al. 2015). In contrast, studies on two other interventions in South Africa and Burkina Faso showed no impact on women's household decision-making. The IMAGE program in South Africa, a microfinance-based program that integrated training on gender and HIV, did not affect the likelihood that a woman needed a partner's permission in at least five out of ten decisions related to household purchases, children's health, and visiting family or friends (Kim et al. 2007). A follow-up study suggested that neither microfinance nor microfinance combined with gender and HIV training had any effect on women's autonomy in decision-making (Kim et al. 2009). Another economic strengthening program that combined savings group, mentoring, and grants had no impact on the household decision-making index, based on decisions regarding purchases, health care, and children in Burkina Faso (Ismayilova et al. 2018). Adding monthly family coaching sessions that engaged husbands and extended family members did not make any difference on household decision-making dynamics.

Limited evidence suggests that increasing women's income through unconditional transfers had no impact on women's household decision-making power. One study examined the effects of a UCT program in Kenya and found no average impact on women's role in making budget decisions (Merttens et al. 2013). Another study looked at the effects of enhancing women's control over transfers through design features in Niger and found that distributing the unconditional transfer through mobile payments, instead of cash, did not affect women's role in decision-making regarding the cash transfer (Aker et al. 2016).

Poverty alleviation programs that adopted the Graduation approach to target the poorest households did not have sustained effects on household decision-making dynamics. These programs combine multiple components designed to help start productive self-employment and aim to provide a "big push" to unlock the poverty trap. Evidence from eight countries offer strong evidence that the

Graduation approach did not have lasting impacts on women's decision-making power in the household despite lasting impacts on indirect indicators of women's agency (Bandiera et al. 2017; Banerjee, Duflo, Goldberg, et al. 2015; Bedoya et al. 2019). For example, in Bangladesh, the program did not have any impact on a women's empowerment index four years after the program ended (Bandiera et al. 2017). This result is consistent with the pooled findings from similar programs in Ethiopia, Ghana, Honduras, India, Pakistan, and Peru, where women had a greater say in decisions related to health expenditures and home improvements immediately after the program ended, but the effects were not sustained one year later (Banerjee, Duflo, Goldberg, et al. 2015).

Economic interventions that leveraged group-based models did not consistently enhance women's role in household decision-making. Women's SHGs or Participatory Learning and Action (PLA) groups have been an effective platform for providing access to financial services, sharing information, and developing skills. However, these gains did not often translate to a greater role for women in household decision-making. Four out of the five multicomponent women's groups programs in South Asia, such as SHGs and PLA groups, did not enhance women's role in household decision-making, including three studies from India and one from Nepal (Joshi, Palaniswamy, and Rao 2015; Holden et al. 2016; Subramanyam et al. 2017; Gram, Morrison, et al. 2018). More than eleven years after an initial study, researchers found that the PLA groups in Nepal did not have any long run impacts measured by the Relative Autonomy Index (Gram, Skordis-Worrall, et al. 2018). The authors proposed that women's agency might be a prerequisite for, instead of a consequence of, participating in PLA women's groups and cautioned against assuming PLA women's groups alone, or with resource transfers, necessarily empower women. The only exception was an SHG intervention in India that provided education, access to group loans/savings, and links to wider development programs, which led to an increase of 5 to 7 percentage points in participants' likelihood of having the final say in children's schooling, medical decisions, and family planning (R. M. Desai and Joshi 2013).

One multicomponent SHG program in Burkina Faso had positive impacts on women's household decision-making power. This agricultural and nutrition program for mothers of young children integrated agricultural production training, access to production assets, and health education. Two years after the program implementation, the intervention increased women's participation in purchasing and health care decisions but not in decisions related to family planning or infant and young child feeding (Olney et al. 2016). The positive effects were partially attributed to women's increased knowledge, ownership of agricultural assets, perceptions about women's role in agricultural production, and community norms around women's land rights (van den Bold et al. 2015).

The only economic intervention that had consistent positive effects on household decision-making was CCTs, mostly in Latin America. However, some studies found impacts in domains directly targeted by the incentives and in areas in which women were often in charge of decisions. Programs that provided mothers with cash transfers conditional on children's schooling or health care appeared to give women greater control over household income, with some important caveats. Three out of four CCT programs in Latin America showed positive impacts on women's role in household decision-making (Handa et al. 2009; Feldman et al. 2009; Bergolo and Galván 2018; Buller et al. 2016). *Progresa* (later rebranded as *Oportunidades*), a cash transfer program to mothers conditional on children's schooling in Mexico, increased women's control over cash income but did not affect decision-making regarding

children's health care, schooling, house repairs, or children's clothing (Handa et al. 2009). In addition, the increased control over cash did not change spending behavior, potentially due to common preferences between husbands and wives or because CCT income reduced intra-household transfers from husbands to wives. Another study of the same program that used different decision-making questions found that the CCT increased women's decision-making power measured by a summary index of five questions regarding investment in children and spending (Feldman et al. 2009).

A similar study using an RD design in Uruguay found that the CCT increased women's ability to make decisions on food expenses by themselves by more than 12 percentage points from a control mean of 28 percent (Bergolo and Galván 2018). The program also increased women's ability to decide the use of money by themselves, but this effect was small and inconsistent across specifications. A cash and in-kind food transfer program conditional on attending nutrition workshops in Ecuador reduced the likelihood of having any dispute in the household by 5 percentage points, which was mainly driven by reduced disagreements over women working for pay (Buller et al. 2016). In contrast, a study using a DID design found that Colombia's CCT program (*Familias en Accion*) that provided cash to mothers conditional on children's health care or schooling was associated with positive behavioral changes that may benefit children's health, but this program did not change women's role in deciding health care for a sick child or spending on food (Lopez-Arana et al. 2016).

While these findings seem promising, it is worth noting that two out of the three studies identified impacts in areas tied to the conditions of the cash transfers (Feldman et al. 2009; Bergolo and Galván 2018), and it is unclear to what extent this truly reflects changes in agency. Researchers have pointed out that in Latin America, gender norms dictate that women are traditionally in charge of decisions within the household, which often entails a greater burden of unpaid household labor at the expense of time for paid work (Martinez-Restrepo and Ramos-Jaimes 2017). Thus, there are some scenarios in which greater household decision-making power might be disempowering for women in the region (Martinez-Restrepo and Ramos-Jaimes 2017).

Furthermore, two conditional transfer programs did not change women's household decision-making power despite large impacts on dimensions of women's agency targeted by the conditionality. In addition to Colombia's CCT program mentioned above (Lopez-Arana et al. 2016), in-kind transfers in the form of cooking oil conditional on delaying marriage for teenage girls in Bangladesh did not affect young women's role in household decision-making despite large effects on child marriage and teenage childbearing (Buchmann et al. 2018). Because parents are often heavily involved in their daughters' timing of marriage in this context, the observed changes in the girls' lives may have been the result of parents' rather than the girls' decision-making.

Importantly, the impacts of CCTs may differ depending on how household decision-making is measured. In Macedonia, CCTs to mothers instead of household heads did not affect household decision-making, based on women's participation in decisions about school, expenses, and finance. However, when measured using a lab experiment, the CCTs reduced women's willingness to pay to become the recipient of a cash transfer offered to the household (instead of her husband being the recipient), suggesting women did gain greater control over income as a result of gender targeting in the CCT program (Almås et al. 2018).

Enhancing women's control over savings or transfers through design features may be a mechanism that led to large intervention impacts on women's agency, some of which might not be captured by conventional decision-making questions. In the Philippines, a commitment savings product increased women's decision-making power, and initially less-empowered women benefited more from increased financial savings and control over committed assets (Ashraf, Karlan, and Yin 2010). Another transfer program that targeted adolescent girls in Malawi also illustrated the importance of design features; approximately 80 percent of the adolescent girls had control over how to spend the transfers made directly to them compared to about 10 percent when the transfers were paid to the girls' households (Baird et al. 2013).

However, design features that gave women more control and showed large impacts on other aspects of women's agency did not always lead to positive effects on household decision-making. For example, a UCT program in Niger that distributed transfers through mobile payments (instead of in cash) increased women's likelihood of traveling to the market and spending on children's clothing but did not affect women's role in decision-making regarding the cash transfer (Aker et al. 2016). In addition, depositing wages from India's federal workfare program directly to a woman's bank account, instead of the household head's accounts, and providing trainings on the accounts increased women's labor force participation in the short term but did not change women's role in decisions about her employment and spending her earnings (Field et al. 2019). These findings indicate that conventional decision-making questions might not be the best measure to capture changes in household dynamics. This was also demonstrated in the aforementioned CCT study in Macedonia which used both a lab-in-the-field experiment and decision-making questions (Almås et al. 2018).

There is limited evidence that employment-focused vocational training, coupled with soft/life skills training and internship or employment support, increased young women's autonomy in personal decisions. Two randomized evaluations found that vocational training programs gave adolescent girls and young women more power in personal decisions. The Economic Empowerment of Adolescent Girls and Young Women program implemented by the Government of Liberia, which combined technical and life skills training and six-month follow-up support for employment or entrepreneurship, increased young women's employment and decision-making power over money despite relatively high degree of control over resources at baseline (Adoho et al. 2014). A similar employment-focused program, the Haiti Adolescent Girl Initiative, offered soft and hard skill training, internships, and stipends to out-of-school young women and increased their autonomy in personal spending and decisions related to work, education, relationships, and making life plans for the future (Rodella, Cuevas, and Atuesta 2015).

Compared to training programs that targeted adolescent girls, the evidence is mixed on whether technical skills training for adult women, alone or combined with gender training, enhanced women's influence over household decisions. Studies on two programs that combined business skills and gender training found some evidence of improved decision-making power in India and Vietnam (Jejeebhoy et al. 2017; Bulte, Lensink, and Vu 2016). A program combining gender transformative education and financial skills training for women in SHGs in India increased women's ability to make independent decisions in spending, purchasing, and their own health care (Jejeebhoy et al. 2017). An entrepreneurship and gender training in Vietnam did not affect women's decision-making measured by a

summary index based on decisions related to household expenditures (Bulte and Lensink 2019). However, when evaluated using a lab-in-the-field experiment, which asked spouses to allocate a set budget first separately and then jointly as a couple, the same training program seems to have increased women's influence in household decisions, because the joint decisions in the experiment were more closely aligned to women's preference after the training (Bulte, Lensink, and Vu 2016).

Nevertheless, two studies of business training programs for female entrepreneurs in Kenya and Peru showed limited effects of business training on decision-making dynamics within the household (McKenzie and Puerto 2017; Karlan and Valdivia 2011). The researchers explained that the null effect of the business skills training program in Peru may have been because these microfinance clients were already running their own businesses and receiving empowerment messages as part of the microfinance programming, leaving little room for further improvement through business training (Karlan and Valdivia 2011).

Opening the training to male partners might counteract the positive effect on women's decision-making power compared to training women only, although engaging men may have other beneficial impacts related to women's agency. A four-day business training plus one-time grant and ongoing mentoring in Uganda increased women's influence over household purchases, but inviting men to join the training reduced women's role in deciding household purchases (E. P. Green et al. 2015). While engaging male partners in the training increased men's support for women, men's participation did not strengthen women's autonomy or improve their attitudes about gender norms compared to the women-only training.

Similarly, the evidence from two studies suggests that access to jobs or employment was insufficient to increase women's decision-making power inside the home. Providing recruitment services to young women in rural India and offering jobs to female applicants in Ethiopia both increased women's employment but did not change women's participation in household decisions such as children's schooling or health (Jensen 2012; Kotsadam and Villanger 2019). In addition, access to subsidized daycare among low-income urban women in Kenya, which led to great gains in mothers' labor market participation and income, did not increase women's participation in most household decisions except for children's health care (Clark et al. 2019). Taken together, these suggest that increased employment does not automatically enhance women's role in household decision-making.

There is limited evidence that institutional approaches to protecting women's rights in the household, such as property rights laws or enhancing justice system's capacity to address domestic violence, improved women's influence over family decisions. Using an RD design, a study in China found that the legal reform that protected women's property rights after a divorce was associated with less-skewed sex-ratio among second-born children and a decrease in men's consumption of cigarettes and alcohol, indicating women's greater decision-making power in fertility and spending decisions (Sun and Zhao 2016). Another study in Peru used a DID design and found that women living near an all-women's justice center, a specialized institution where female officers provide policing and legal services to reduce gender-based violence, were more likely to make decisions jointly with their husbands (Kavanaugh, Sviatschi, and Trako 2019).

Future Research

More systematic research and validation exercises are needed to develop measures of women's household decision-making power that are context-specific. This includes validating survey questions on different kinds of household decisions, developing better ways to measure both the process and outcomes of decision-making that minimize reporting bias, and tailoring indicators from internationally standardized metrics to gender dynamics in specific contexts. Survey questions on women's role in household decision-making might capture intervention impacts when women's decision-making power is extremely constrained at baseline (i.e., having no say in decisions at all), but as women gain power in the household, more nuanced measures may be needed to reflect women's ability to act as her own agent. In addition, what women perceive as having agency within the household might differ by context. For example, in cultures where women are already in charge of household decisions, how do we identify areas where women lack agency, design interventions accordingly, and develop valid instruments to measure changes in agency?

Given the diverse household structures in LMICs, more research is needed on how to enhance women's agency by changing household dynamics that involve family members other than, or in addition to, husbands. In multigenerational households, a woman's in-laws may play an important role in decisions about household spending, young women's mobility, their employment outside the home, and children's health. In such settings, what are best practices to measure decision-making dynamics that involve multiple family members? What are opportunities for interventions to recruit other family members, such as senior women in the household, as allies to support younger women's agency? Similarly, only measuring the relative decision-making power between husbands and wives might also overlook the specific family dynamics posed by single parenthood, cohabitation, same-sex families, and polygamy. In particular, developing validated metrics for measuring decision-making in female-headed households, a common and often marginalized household composition in many contexts, is an important area for future research.

4.3. Freedom of movement

Mobility is a key area in which women's agency is constrained. In seventeen countries around the world, for example, married women are not able to legally move as freely outside the home as married men (World Bank 2015). Strict customs limiting women's freedom of movement stem from a social emphasis on women's and girls' safety and "purity," which requires sheltering them from potential threats. Jayachandran (2015) explains that customs related to female seclusion and the resulting constraints on women's mobility can partially explain gender gaps in education and labor force participation in some contexts. Without freedom of movement, women and girls are unable to participate in social, political, and economic institutions and are accordingly constrained along multiple dimensions. An adult's ability to move without a guardian or go outside without permission is one of the most fundamental expressions of one's ability to make and act on one's own decisions. As such, we consider freedom of movement to be a direct indicator of women's agency.

We include studies that measure concepts related to women's self-reported ability to travel to different locations, along with self-reported instances of having traveled to various locations over a certain period of time. Most of the studies that measured outcomes related to freedom of movement evaluated either economic interventions (e.g., cash transfers, savings groups, SHGs, microcredit, workfare payments, etc.) or economic interventions plus empowerment, vocational, or soft skills trainings. Economic interventions might be able to change power dynamics in a household by giving women more control within the family, enabling them to have more freedom of movement. Alternatively, threats to existing power dynamics may cause backlash, leading women to have less freedom of movement. Interventions might also provide women with opportunities that require them to travel outside the home (e.g., trainings, jobs, community meetings), offering a more mechanical pathway to enhancing mobility. In addition, empowerment trainings might offer new perspectives on gender dynamics and embolden women to negotiate for more freedom of movement. Many of the studies measured freedom of movement as a secondary outcome, and thus offer limited explanations for the causal pathways that explain impacts.

In this section, we review thirteen papers primarily evaluating economic interventions (with or without training). Since the focus of this review is to analyze the impacts of policies and programs that seek to enhance women's agency, we do not include evidence related to more general transportation interventions nor do we examine the unintended consequences of policies on women's mobility. As such, our takeaways in this section are limited, and more research is needed on this topic.

Main takeaways

- Programs such as bundled interventions or SHGs that addressed multiple constraints that women faced (e.g., control over resources or political participation) provided modest improvements in women's freedom of movement.
- Most studies did not disentangle what caused increases in freedom of movement. However, two
 studies identified that increasing women's power in the home through control over financial
 resources was effective, suggesting that this may be a mechanism to explore further.

Programs such as bundled interventions or SHGs that addressed multiple constraints that women faced (e.g., control over resources, political participation) provided modest improvements in women's freedom of movement. Five of the seven studies included in this review that combined financial programs with additional training and measured mobility found positive but modest impacts on women's freedom of movement (Bedoya et al. 2019; Jejeebhoy et al. 2017; Groh et al. 2012; Rodella, Cuevas, and Atuesta 2015; Buchmann et al. 2018), while two did not (Holden et al. 2016; Karlan, Thuysbaert, and Gray 2017). The programs that enhanced women's mobility included: the Graduation approach in Afghanistan (Bedoya et al. 2019), a program in India that combined SHGs with gender transformative learning sessions (Jejeebhoy et al. 2017), a program in Jordan that provided young women with both vouchers for employment and soft skills training (Groh et al. 2012), a program in Haiti that combined technical and soft skills training with an internship and stipend for young women (Rodella, Cuevas, and Atuesta 2015), and an adolescent girls' empowerment program coupled with in-kind incentives to girls for remaining unmarried (Buchmann et al. 2018).

Both Groh et al. (2012) and Buchmann et al. (2018) tested the impacts of an economic intervention and empowerment/soft skills training separately and combined. Interestingly, both found that the economic

components alone reduced mobility, while the combined interventions increased mobility. For example, Groh et al. (2012) evaluated a program that provided young women with vouchers for employment, soft skills training, both, or none in Jordan. Researchers used a mobility index between zero and six to measure how many places the young woman could travel by herself. Women who received only access to the job voucher were able to go to 0.54 fewer places on average compared to women in the comparison group who reported that they could go to an average of 5.2 locations (a 10 percent decrease). Women who received only the training did not experience changes in mobility on average. However, women that received both the job voucher and soft skills training were able to go to 0.3 more locations than women in the comparison group (a 6 percent increase) (Groh et al. 2012).

While the previous five evaluations of economic interventions plus trainings found impacts on freedom of movement, two studies evaluated the marginal benefits of adding trainings to existing economic interventions and did not capture positive impacts on freedom of movement. Holden et al. (2016) evaluated the impact of offering to SHGs trainings on how to strengthen their processes, along with trainings designed to combat violence against women in India, and compared outcomes for women in SHGs that did not receive the trainings. Access to the trainings within SHGs did not enhance women's mobility in this context nor did it have impacts on financial outcomes or violence against women. Holden et al. (2016) suggested that the program may not have been long enough to adequately challenge gender norms in this context. Another study evaluated the impact of adding health trainings to microcredit groups in Benin and also varied the gender composition of the groups, comparing the impact of providing the services in women-only groups versus mixed-gender groups. Access to the health training did not result in any differences in a women's empowerment index, which included questions about mobility (Karlan, Thuysbaert, and Gray 2017). These findings suggest that the length and content of trainings that are bundled with economic interventions are important.

Among programs that primarily consisted of economic interventions, four interventions that offered access to financial resources increased women's freedom of movement (Joshi, Palaniswamy, and Rao 2015; Prillaman 2017; Aker et al. 2016; Field et al. 2019), while one did not (Baro et al. 2013). The effective interventions all increased women's freedom of movement alongside changing other important aspects of women's agency such as political participation or facilitating more direct control over financial resources. In India, two studies found that SHGs enhanced both women's community/political participation along with freedom of movement (Joshi, Palaniswamy, and Rao 2015; Prillaman 2017). For example, a study using an RD design found that access to SHGs led to a range of positive impacts for women, including increased economic networks, civic skills, and political participation, along with increased freedom of movement (Prillaman 2017).

Two interventions in India and Niger evaluated interventions that offered women more direct control over cash transfers or workfare payments and found that they were effective in enhancing mobility (Aker et al. 2016; Field et al. 2019). In India, researchers evaluated an intervention that opened bank accounts for women linked to government workfare payments and offered information sessions on the benefits of using the banking services. With access to the bundle of services, women who faced the most social constraints had higher labor force participation, more agency over purchases, and scored higher on an index measuring women's movement to five common locations relative to the comparison group that only received the bank accounts. Researchers suggested that the key mechanism was increasing women's

economic options outside of marriage, which served to increase their autonomy in the household (Field et al. 2019). In Niger, women who received access to unconditional transfers via electronic payments were 9 percentage points more likely to have visited the market in the last week compared to 19 percent of women who received the transfers in cash (a 47 percent increase). Researchers proposed that the electronic transfers reduced the observability and timing of the transfer which increased women's power in the household (Aker et al. 2016).

The economic intervention that was not effective in enhancing women's mobility was the Savings for Change savings group in Mali. As the evaluation noted, in this setting, "women spend almost all of their time inside the household, leaving only for some specific, work-related task. Any deviation is exceptional" (Baro et al. 2013). These severe restrictions may partially explain why women's mobility did not improve as a result of access to the program. Yet, some of the other interventions included in this review that enhanced women's freedom of movement were also implemented in settings with extreme restrictions on women's mobility. For example, the study in Jordan cited above found that only 51 percent of women in their sample could go the market alone at baseline; the evaluation of the program in India that combined SHGs with gender transformative learning sessions found that between 49 and 70 percent of women could visit friends or relatives outside of the village unescorted (Groh et al. 2012; Jejeebhoy et al. 2017). Nonetheless, it is clear that the constraints in the rural setting in Mali were substantial enough to block changes in women's freedom of movement.

Future research

Taken together, these findings suggest that some bundled interventions that effectively address multiple constraints that women face, including but not limited to economic ones, can be successful in enhancing freedom of movement. Nonetheless, most studies did not disentangle what caused increases in freedom of movement directly. As outlined above, two studies offered evidence that enhancing women's direct control over financial resources through deposits in women-owned bank accounts or digital payments enhanced women's ability to protect resources and gain power in the household, which was in turn leveraged to increase freedom of movement (Field et al. 2019; Aker et al. 2016). This mechanism of enhancing women's direct control over financial resources should be explored further, along with the complementarities of different interventions within multicomponent programs that bundle economic interventions with trainings or other elements.

There are many additional open questions on improving women's freedom of movement. Improving perceived or actual public safety merits further research; some ongoing randomized evaluations are currently exploring open questions related to updating entire public transportation systems or strengthening transportation options designed for women, such as women-only metro cars. Improving perceived safety through police presence, lighting, or other infrastructure may also be promising. Furthermore, interventions may aim to shift cultural attitudes and norms, including religious customs, that limit women's mobility or ability to enter certain public spaces. Effective interventions will vary dramatically according to context and subgroups including factors related to religion, ethnicity, caste, class, etc. As such, comprehensive heterogeneity analysis will be important.

4.4. Freedom from violence

Women's and girls' ability to exercise agency can be severely limited when they are not free from violence. Violence against women and girls is pervasive and can take many forms; it can be physical, sexual, or emotional. Often, it occurs within the home, perpetrated by intimate partners or other family members. In other cases, women and girls are exposed to harassment and violence outside the home, in public spaces like the street, public transportation, their workplace, or school. Direct exposure to violence, as well as the perceived threat of violence, undermines women's and girls' integrity, impedes their ability to make decisions, and, more broadly, prevents them from exerting control over their lives. Among the well-documented consequences of violence that can undermine women's bodily integrity, the World Health Organization lists health problems like injuries, unintended pregnancies, sexually transmitted infections, and depression. In extreme cases, gender-based violence can be fatal for victims (World Health Organization 2017). Violence against women and girls can also lead to unwanted pregnancies, suicide attempts, and long-lasting mental disorders, factors that can restrain women's and girls' ability to exert control over their lives. The threat of violence alone, and not only direct exposure to it, can limit women's ability to make choices. In India, for example, one study found that young women choose lower-quality colleges in order to avoid routes to school that they perceive to be more dangerous (Borker 2018). For all of these reasons, in this review we consider freedom from violence to be a direct indicator of women's agency.

In this section, we review 33 studies that analyzed violence against women and girls and evaluated programs that provided transfers, microcredit, savings, employment and entrepreneurship opportunities, empowerment/life/soft skills trainings, community mobilization, and a mass media intervention. The evidence focused predominantly on IPV, with considerably fewer studies analyzing other forms of violence against women and girls, like those occurring outside the home and perpetrated by non-family members. The majority of studies on IPV measured violence through surveys that directly asked women and girls about their exposure to specific episodes of physical, emotional, or sexual violence. Researchers used similar (most of the time identical) versions of the domestic violence questionnaire from the Demographic and Health Survey, allowing comparability of results across studies.

We organize this section into two parts. The first describes what interventions are effective in reducing IPV, the most widespread form of violence against women and girls and the most investigated by the literature. The second part focuses specifically on violence against adolescent girls. Most studies that examined violence against adolescent girls used metrics that captured different forms of violence besides IPV, like violence occurring outside the home (e.g., at school) or sexual violence perpetrated by men other than partners.

3.4.1 Intimate partner violence

IPV comprises all acts of physical, sexual, and emotional violence perpetrated against women by an intimate partner. IPV is the most common form of violence against women and girls. According to the World Health Organization, one out of three women worldwide report having been victims of physical and/or sexual abuse inflicted by their intimate partner during their lifetime (World Health Organization 2017).

Interventions may reduce IPV through different mechanisms, such as raising awareness about IPV or changing attitudes about gender norms. In particular, the effect of women's increased access to resources (e.g., through cash transfers, microcredit, savings groups, or employment) on their exposure to IPV is exante unclear. As emphasized in a recent systematic review summarizing the effect of cash transfers on IPV, increased income for women could activate different mechanisms, which in turn may translate into increases or decreases in violence (Buller et al. 2018). Women's access to financial resources could increase IPV through household conflict arising from diverging preferences over expenditures or through men using violence instrumentally to extract resources from their spouse. Employment and entrepreneurship may increase women's mobility, visibility, social status, and time spent outside the home, among other things. If men feel threatened by women's changed status and role, particularly in contexts characterized by inequitable gender norms, these changes could lead to male backlash and higher IPV. However, increased access to resources may reduce IPV by positively impacting men and women's economic security and emotional well-being, reducing household conflict over limited resources, increasing women's decision-making power and self-efficacy, or improving women's outside options from marriage, which would allow women to move away from abusive partners.

Analyzing all the vast IPV literature, which also includes programmatic approaches only targeted towards men and studies investigating the long-term determinants of IPV, goes beyond the scope of this review. Our analysis is based on interventions targeting women, alone or together with their partners or family members, and focuses on the short- to medium-term effects of these programs.

Main takeaways

- There is strong evidence that anti-violence programs (e.g., gender trainings, couples' dialogues, family coaching, and media campaigns) were effective in protecting women from IPV and other forms of violence. These effects often occurred in conjunction with changes in gender attitudes or norms around violence, suggesting that these might be important mechanisms.
- Evidence indicates that women's access to resources through cash and food transfers decreased average experiences of IPV in the short run. In particular, transfers reduced physical and sexual forms of violence in some settings; however, one study documented average increases in emotional violence for a subset of women. Important mechanisms included alleviation of poverty-related stress and lower tolerance for violence. Access to resources through microcredit, savings groups, or employment did not lead to similar impacts.
- A few studies suggest that increased access to employment led to an increase in violence against
 women, but the evidence is weak. Nonetheless, women with low levels of empowerment may be
 more vulnerable to physical or emotional forms of violence when exposed to economic
 interventions.
- Several studies suggest that economic interventions achieved larger beneficial effects when bundled with components that intentionally addressed violence, like gender trainings or family dialogues.
- The evidence on programs with community mobilization components is mixed, and models varied substantially.

• Increasing the role of women in policing was a promising approach to encourage reporting of gender-specific crimes, including IPV. However, more evidence is needed to assess whether these interventions act as a deterrent against actual crime against women.

There is strong evidence that intentional programming to combat IPV (e.g., gender trainings, couples' dialogues, and media campaigns) were effective in reducing IPV prevalence. These effects often occurred in conjunction with changes in gender attitudes or norms around violence, suggesting that these might be important mechanisms. Programs that explicitly aimed at reducing IPV were successful in a variety of contexts in South Asia and sub-Saharan Africa; they included gender trainings targeted towards couples or families (Doyle et al. 2018; Gupta et al. 2013; Falb et al. 2015; Ismayilova et al. 2018), towards women and men separately (Jejeebhoy et al. 2017; Naved et al. 2018), or towards women only (Kim et al. 2009; Subramanyam et al. 2017). One study evaluated the effect of a media campaign (D. P. Green, Wilke, and Cooper 2018).

In India, a gender transformative group program for female SHG members reduced physical IPV, and, at the same time, changed attitudes towards gender norms. The latter effect occurred not only for direct program beneficiaries, but also among other women in the community (Jejeebhoy et al. 2017). Similarly, the Gram Varta program in India, a PLA intervention for SHG members focusing on women's agency and health, reduced the occurrence of some episodes of emotional and physical IPV, including unwanted sex. As described in the "power within" section, this program also impacted women's self-confidence in refusing sexual intercourse (Subramanyam et al. 2017). Among successful anti-IPV interventions that targeted couples or families, one example is a gender-transformative couples' intervention in Rwanda, which affected gender roles and power relations and led to large reductions in physical and sexual IPV over the past year (Doyle et al. 2018). An anti-IPV intervention in urban Bangladesh implemented women's and men's groups focusing on gender topics and violence reduced physical IPV but only for adolescent girls and only where men's groups also took place (Naved et al. 2018). Researchers hypothesized that various mechanisms, such as increased awareness on rights and violence against women, acquisition of communication and negotiation skills, a reduction of isolation, an increase in help seeking, self-confidence, and activism, could have contributed to the reduction in IPV. These channels, however, were not directly tested (Naved et al. 2018).

In Uganda, a media campaign featuring three videos encouraging reporting violence against women perpetrated in the household led to a reduction in intra-household violence, including, but not exclusively, IPV (D. P. Green, Wilke, and Cooper 2018). In addition to reducing actual violence prevalence, the program also increased willingness to report violence among women who were directly exposed to the media campaign. This effect emerged together with a reduction in perceived social sanctions for reporting violence among both women and men and with an increase in the expectation that the community would intervene in the case of a violent incident. However, contrary to the interventions described above, this program did not shift individuals' attitudes about gender-based violence (D. P. Green, Wilke, and Cooper 2018).

More evidence on how programs conducted at the community level affect violence is needed. Moreover, future studies should focus on other forms of violence besides IPV, like harassment experienced outside the home.

Evidence indicates that cash and food transfers, while in place, decreased average experiences of physical and sexual IPV, in some settings by alleviating poverty-related stress, increasing women's decision-making power, or changing women's tolerance for violence. However, one study documented average increases in emotional violence for a subset of women. Two studies evaluated CCTs, vouchers, or food transfers to women; two evaluated UCTs; and one evaluated both an unconditional and a conditional version of a cash and food transfer in two separate treatment arms (Hidrobo, Peterman, and Heise 2016; Roy et al. 2018; Kilburn et al. 2018; Haushofer et al. 2019; Hidrobo and Fernald 2013). These evaluations were conducted in different contexts, and all studies found some evidence of IPV reductions. In Ecuador, a six-month cash, vouchers, or food transfer program for women, conditional on attending a nutritional training, led to a reduction in physical and sexual IPV, as well as in husbands' controlling behaviors (Hidrobo, Peterman, and Heise 2016). A related mixed-methods study found evidence supporting the presence of several mechanisms underlying these results. For example, the program reduced marital conflict; increased happiness and families' sense of well-being; and enhanced women's self-confidence, decision-making power, and freedom of movement (Buller et al. 2016). In Bangladesh, a similar program that offered conditional cash transfers, food transfers, or cash plus food transfers, coupled with nutrition behavior change communication, reduced physical IPV by improving women's threat points (through increased access to and control over resources and increased locus of control) and increasing household wealth (which in turn reduced stress and conflict) (Roy et al. 2018). In South Africa, a cash transfer targeted to girls conditional on monthly high school attendance decreased the risk of physical IPV by delaying girls' sexual debut and reducing the number of sexual partners (Kilburn et al. 2018).

Two studies found that UCTs, while in place, reduced women's vulnerability to some forms of IPV (Haushofer et al. 2019; Hidrobo and Fernald 2013). In Kenya, a two-year UCT reduced physical and sexual violence for women who received the cash. Based on the prediction from a theoretical model, researchers argued that these effects were due to a change in women's tolerance for violence (Haushofer et al. 2019). Another UCT in Ecuador decreased men's controlling behaviors but did not have an impact on emotional or physical violence (Hidrobo and Fernald 2013). This study found that women's educational level was a moderator of the program's impact. More educated women benefited more from the program and experienced reductions in emotional violence and controlling behaviors. Among less educated women, the program decreased emotional violence if women had less schooling than their partner, but it increased emotional violence if women had more years of education than their partner (Hidrobo and Fernald 2013). Researchers highlighted that, in situations where outside-of-marriage options for women are not a credible threat (e.g., for less educated women), increases in women's access to resources may lead to male backlash, i.e. to men resorting to violence in order to control the situation.

The aforementioned study in Bangladesh suggests that the beneficial effects of unconditional transfers may be short-lived (Roy et al. 2018). When researchers evaluated a cash, food, or cash plus food transfer without conditionality in a separate treatment arm, they found suggestive evidence of a short-run impact, but this effect faded away between six to ten months after the end of the program. In contrast, women who received conditional transfers experienced sustained reductions in physical IPV.

It is important to note that none of the studies in this review were conducted in conflict or humanitarian settings where cash transfers are increasingly used, indicating the need for additional research in these contexts. In addition, the aforementioned studies report average impacts, which may mask increases in violence among certain subsets of women, as described above in Ecuador (Hidrobo and Fernald 2013).

There is suggestive evidence that conditioning transfers (e.g., on attending nutrition trainings) was effective in generating sustained effects on IPV. As outlined above, three CCT programs were effective in protecting women against IPV. Two of these studies could not separately assess the importance of conditionality in activating the mechanisms that led to IPV reductions (Hidrobo, Peterman, and Heise 2016; Kilburn et al. 2018), but one study that directly compared transfers with and without conditionality showed that conditioning transfers may generate long-lasting impacts (Roy et al. 2018). Taken together, these studies provide suggestive evidence that conditionality of transfers might activate pathways for a sustained reduction in IPV after the end of an intervention.

There is no evidence that microcredit or savings groups programs alone had impacts on IPV.

Overall, the evidence on the effect of microcredit and savings groups on IPV is limited, as highlighted in a recent commentary focusing on microfinance programs (Peterman, Palermo, and Ferrari 2018). Only two studies among those included in this review evaluated how microfinance or savings groups alone affected IPV. These were studies where microfinance and VSLAs were coupled with other programming in separate treatment arms. In South Africa, women from villages exposed to a microfinance intervention for two years did not experience changes in IPV (Kim et al. 2009). In Burkina Faso, VSLAs did not have an impact on physical violence, although they reduced emotional violence over the past year (Ismayilova et al. 2018). More evidence is needed in order to assess how these types of economic interventions impact IPV, and in particular, how these interventions differ from cash and in-kind transfers in changing household dynamics.

A few studies suggested that programs increasing female employment or entrepreneurship, like job offers or business training programs, may have led to adverse effects for women and increased their vulnerability to IPV, but the evidence is weak. When observed, these adverse impacts occurred among women with low initial levels of empowerment and in contexts with inequitable gender norms. The goal of this part of the review is not to cover the entire literature on the relationship between employment and IPV, as this would include descriptive studies as well as analyses that examine how contextual employment affects IPV. Instead, we focus on studies that investigated the effect of individual-level employment. Two studies in sub-Saharan Africa identified little to no effect of employment on IPV, but one study in Vietnam found that increasing women's income through entrepreneurship increased IPV (E. P. Green et al. 2015; Kotsadam and Villanger 2019; Bulte and Lensink 2019).

A five-day business training for women in Uganda combined with a start-up business grant, which intended to increase women's entrepreneurship, positively impacted women's business earnings but did not have an impact on emotional or physical IPV. The program increased a marital control index due to husbands extracting money from their partners against their will. At the same time, however, the program had a positive effect on relationship quality (E. P. Green et al. 2015). In Ethiopia, a program, which offered jobs to women in garment and shoe factories and increased their access to employment and

wages, reduced emotional IPV but had no effect on physical IPV. There was suggestive evidence that the job offer increased physical IPV among women with low decision-making power at baseline, if they started working, but these results were statistically significant only when including control variables (Kotsadam and Villanger 2019).

In Vietnam, in a context with strong stigma associated with divorce, a gender and entrepreneurship training program for women microentrepreneurs and members of a microfinance organization led to an increase in physical IPV, although only when the latter was measured through a list experiment (Bulte and Lensink 2019). When using a measure of physical violence based on one direct question, however, researchers found opposing effects: the program decreased physical IPV, suggesting that women were reluctant to report abuse when asked directly. A mediation analysis highlighted how the main mechanism for the increase in IPV was women's higher income, while increased decision-making power was associated with lower IPV.

Taken together, these studies suggest that the relationship between women's employment and IPV is complex. As highlighted by the study in Vietnam, this relationship might be mediated by different mechanisms generating countervailing effects. Future research should further explore these and other possible pathways.

Several studies suggest that economic interventions were more effective in reducing IPV when coupled with other programming, like gender trainings and family dialogues. Economic interventions (e.g., microfinance, savings groups, livelihood trainings, or transfers) were often coupled with programming that addressed gender issues and IPV. The economic component was mostly groupbased, since groups provided an easily accessible platform for gender-based programming. Four studies in sub-Saharan Africa found that adding gender programming to economic interventions led to incremental effects. In the IMAGE program in South Africa, only women receiving a gender training in addition to microfinance services experienced large reductions in physical and sexual IPV over the past year (Kim et al. 2009). In Burkina Faso, VSLAs reduced women's exposure to emotional violence in the past year, but adding family coaching led to even larger effects (Ismayilova et al. 2018). In rural Côte d'Ivoire, adding gender dialogues to VSLAs decreased economic abuse, e.g., capturing whether the partner obligated that a woman give him money. Adding gender dialogues reduced physical, but not sexual, IPV for women who, together with their partners, attended at least 75 percent of the gender dialogue sessions. Yet, this finding should be interpreted with caution since these high-attendance couples might have characteristics that differentiate them from the other participants and could potentially explain the effects on IPV (Gupta et al. 2013). In Uganda, women receiving a business grant and a microenterprise training experienced increased marital control, but these increases did not occur in a separate arm where the microenterprise trainings also involved husbands and included additional materials on cultural, gender, and financial barriers to women's entrepreneurship, communication, and joint problem-solving (E. P. Green et al. 2015).

The evidence on programs with community mobilization components is mixed, and models varied substantially. Various community- and society-level factors, such as inequitable gender norms and attitudes condoning violence, have been associated with violence (World Health Organization 2017). Programs that engage and mobilize society to achieve a common goal (for example through community-

level activities involving groups and associations, local leaders, service providers, and police officers) may erode these deeply rooted factors and reduce women's vulnerability to violence. Three of the community mobilization programs we included in this review were found to be effective in reducing violence against women (Kim et al. 2009; Jejeebhoy et al. 2017; Subramanyam et al. 2017), while two were not (Abramsky et al. 2014; Holden et al. 2016). The IMAGE study in South Africa, which reduced physical as well as sexual IPV, included a gender and HIV training curriculum for women together with community mobilization activities to engage youth and men in intervention villages (Kim et al. 2009). A program with SHGs in India, which successfully reduced women's vulnerability to physical IPV, consisted of community-wide activities like street plays, meetings, and gender power walks to increase individuals' understanding of gender and social exclusion (Jejeebhoy et al. 2017). The *Gram Varta* program in India, which reduced emotional and physical IPV, included content related to women's agency in its community meetings offered to SHG members as well as local leaders and service providers (Subramanyam et al. 2017). These programs all offered components that challenged gender norms in the community.

Neither the SASA! initiative in Uganda (Abramsky et al. 2014) nor the Madhya Pradesh Safe Cities initiative in India (Holden et al. 2016) succeeded in reducing IPV. In Uganda, a four-year community mobilization intervention to reduce IPV and HIV ("SASA! Activist kit for preventing violence against women and HIV") involved community activists, local governmental leaders, police officers, and health care providers to carry out informal activities among members of their social networks and to introduce new concepts of power between genders. The intervention appears to have been successful at changing attitudes in the community but did not affect physical or sexual IPV. However, there were only eight clusters in this study and researchers did not correct the reported standard errors to account for the small number of clusters. Thus, the reported standard errors might have been too small, casting doubts on the statistical significance of the intervention's effects. On the other hand, researchers posited that contamination between treatment and control areas, migration, and interruptions to the intervention could have prevented the identification of statistically significant effects (Abramsky et al. 2014). The Madhya Pradesh Safe Cities initiative in India, a community mobilization program to prevent IPV and harassment against women and girls in public places, did not successfully reduce harassment or physical, sexual, or emotional IPV in public spaces. Contrary to the just described Ugandan study, this program also failed to shift gender attitudes, probably due to the short program duration (only a few months) and low dosage (Holden et al. 2016). More research is needed to better understand how community mobilization programs can effectively reduce IPV and other forms of harassment outside the home.

Limited evidence suggests that increasing the role of women in policing encouraged reporting of gender-specific crimes. However, there is weak evidence that this was effective in reducing actual crime. Using a DID design, two studies examined the gradual implementation of all-women justice centers in Peru (Kavanaugh, Sviatschi, and Trako 2019) and of all-women police stations in India (Amaral, Bhalotra, and Prakash 2018). Both studies found increases in women's reporting of gender-based violence cases, including domestic violence, and suggested that female representation in law enforcement was an important factor explaining these results. However, only the women's justice centers in Peru were effective in reducing actual crime against women, including domestic violence, femicides, and female deaths due to aggression. Researchers found that women's access to justice centers also

increased their decision-making power in the family, and this led to positive effects on investments in children's human capital (Kavanaugh, Sviatschi, and Trako 2019).

3.4.2 Violence against adolescent girls

Exposure to violence early in life, particularly sexual violence, can lead to long-lasting consequences for girls that persist into adulthood. For example, early exposure to violence can make girls more likely to engage with abusive partners later in life (World Health Organization 2017). Studies evaluating the effectiveness of programs in reducing girls' exposure to violence did not merely focus on IPV but also included any type of physical, sexual, or emotional violence perpetrated by other individuals besides the partner, both inside and outside the home. We reviewed six evaluations in this section.

Main takeaways

- The evidence is weak that life skills training delivered in safe spaces worked to reduce violence against girls.
- In-school defense trainings for girls were a promising approach to protect girls from violence but more research is needed. Changes in gender attitudes and increases in adolescents' self-defense skills and self-efficacy were important mechanisms.

The evidence is weak that life skills training delivered in safe spaces worked to reduce violence against girls. These programs were ineffective in reducing violence when implemented in humanitarian settings or in contexts affected by epidemics. Only one study out of five evaluating the impact of safe space interventions found reductions in violence against girls. In Bangladesh, a safe space program (called BALIKA) coupled with life skills training and a training on gender rights reduced girls' exposure to harassment outside the home, in school, or in class, but the program did not impact girls' exposure to violence at home (Amin et al. 2016). The gender-rights component, which delivered information on issues related to gender-based violence, among others, was essential for the program's success; in other treatment arms where safe spaces and life skills trainings were coupled with either a tutoring component or a livelihood training, girls' exposure to harassment did not significantly decrease.

As highlighted by the WHO, situations of conflict, displacement, or aggregate shocks like epidemics can not only exacerbate women's exposure to violence, but also lead to the emergence of new forms of violence (World Health Organization 2017). In these contexts, programs like safe spaces for girls may therefore be insufficient to protect them against violence. Four safe space programs implemented in a refugee camp in Ethiopia (Stark, Asghar, et al. 2018), in the conflict-affected Democratic Republic of the Congo (Stark, Seff, et al. 2018), and in Sierra Leone during the Ebola outbreak (Bandiera et al. 2018) However, a safe space and skills training program for adolescent girls in Liberia did not reduce violence against adolescent girls (Özler et al. 2020). Researchers attributed the lack of beneficial effects to the inability of safe space programs to change structural determinants of violence in the short-run and to girls' particular vulnerability to violence in unstable settings.

There is limited evidence that in-school empowerment and self-defense trainings decreased girls' exposure to sexual assault, but the amount of evidence is limited. Increased self-defense skills and

knowledge and higher self-efficacy were important mechanisms. Two studies in sub-Saharan Africa showed that increased awareness among girls regarding gender-based violence, and their ability to face assault and harassment through effective behaviors, can limit girls' exposure to violence. Two similar inschool trainings in Kenya (Baiocchi et al. 2017) and in Malawi (Decker et al. 2018) aimed to transmit knowledge, physical, and verbal skills to be used in case of assault and also to build girls' self-confidence and self-efficacy. They both found reductions in girls' exposure to sexual violence, which occurred through girls' increased self-efficacy (Baiocchi et al. 2017) and increased skills and knowledge about self-defense (Decker et al. 2018). Despite the relatively limited evidence base, this type of intervention holds promise; self-defense programming targeted towards girls may reduce their exposure to assault.

Future Research

As women and girls become more mobile, it is essential to understand what interventions can protect them from violence perpetrated outside the home. For example, how can community mobilization interventions effectively change social norms and combat violence against women in public spaces? Can higher participation of women in policing act as a deterrent against gender-specific crimes? What interventions are effective in protecting women and girls in conflict settings, including both violence prevention and recovery from trauma? How can safe spaces for adolescent girls be tailored to these contexts? Future studies should develop standardized metrics and analyze other forms of violence and harassment besides IPV, like those occurring in public spaces and perpetrated by individuals other than intimate partners.

While the beneficial effects of increased access to financial resources through cash transfers have been largely demonstrated, the causal pathway is still not entirely clear. In addition, it will be important to delineate how microcredit, savings, employment, and other economic empowerment interventions differ from cash and in-kind transfers in changing household dynamics. What mechanisms can explain the lack of effects of women's labor force participation on IPV? How can economic interventions address male backlash and prevent men from using violence to extract resources from women? Conversely, can programs that successfully reduce IPV through changes in attitudes about gender norms (e.g., gender trainings and media campaigns) also support attitude change related to other aspects of women's agency, such as labor force participation?

Evidence on the effectiveness of engaging men to prevent violence against women and girls is poor and it is not clear to what extent changing men's attitudes will reduce violence perpetration or improve social norms (Jewkes, Flood, and Lang 2015). More studies are needed to explore strategies that can effectively engage men since they are often the perpetrators of IPV. For example, if brief interventions on gender norms are not effective over the long term (Fleming et al. 2018), what are other scalable strategies to change societal norms about masculinity and reduce IPV? What kinds of interventions are effective to develop gender-equitable norms among boys? In addition, since engaging men as a strategy to reduce IPV often works through different mechanisms compared to interventions that target women and girls, future research is needed to explore how to coordinate these separate efforts to address multiple risk factors of IPV at different levels, including the provision of services for survivors. More broadly, more investigation is needed to assess the effectiveness of community-level interventions that discourage men from perpetrating violence by changing social norms and engaging bystanders.

5. Indirect Indicators of Agency

In this section, we summarize the evidence from studies that measured outcomes that fall within each of the indirect indicators of agency under the family, economic, and political and community domains. Indirect indicators of agency are downstream outcomes that result from exercising agency and hence can reflect the presence of agency. In many studies, indirect indicators are used as proxy measures for "achievements of agency," i.e., meaningful achievements enabled by women's empowerment. We identify three domains of agency along with several indicators under each domain that reflect priority areas in which women often express agency:

| Domain of agency | Selected indirect indicators of agency |
|--------------------------------|---|
| Family domain | Timing of marriage and childbearing Contraceptive use |
| Economic domain | Labor force participation Income generation from entrepreneurship |
| Political and community domain | Participation in politics and community decision-making Voting behavior Participation in groups and ties in the community |

In the following sections, we provide an overview of the selected indirect indicators and a justification for their inclusion. We then summarize studies that measure outcomes relevant to the selected indirect indicators.

5.1. Family domain of agency

Indirect indicators in the family domain of agency are proxies for women's ability to make choices within the realm of the household, particularly sexual and reproductive decisions. Girls' ability to delay marriage and childbearing until adulthood is widely considered to be an indicator of greater control over critical life changes. Access to and use of a preferred contraceptive method is an important element in securing the autonomy and well-being of women and girls. Although these indicators are often considered desirable outcomes for women and girls and are correlated with greater ability to exercise choice in other critical areas of life (e.g., labor force participation and education), a woman can still express agency in the family domain without delaying marriage or childbearing. Further, a woman can act as an agent in choosing to marry at a young age or not to use any modern contraceptive method. Similarly, achieving gains in these indicators does not necessarily reflect a woman's agency in the family domain, such as reduced fertility due to pressure from male partners to terminate a pregnancy (Grace and Fleming 2016). For these reasons, we consider indicators in the family domain indirect measures of women's agency.

These indicators are by no means a full list of outcomes important to women's agency in the family domain. For instance, based on data from more than ninety countries, women spend about three times more hours a day on unpaid care and domestic work than men, which limits their ability to participate in education, leisure, or economic activities (United Nations 2019b). However, we did not include time use in the household as an indicator of agency due to the lack of randomized evaluations that measured unpaid care work as a primary outcome.

5.1.1. Timing of marriage and childbearing

Worldwide, 12 million girls are married before adulthood each year (UNICEF 2019). Approximately 16 million girls aged 15-19 years old and 2.5 million girls under 16 give birth each year in LMICs (United Nations Population Fund 2015; Neal et al. 2012). Marriage before the age of eighteen is a violation of human rights, is associated with an increased risk of domestic violence and social isolation, and negatively affects girls' health, education, and future prospects (Kidman 2017). Levels of child marriage are highest in sub-Saharan Africa, where 38 percent of young women were married before the age of eighteen, and followed by South Asia, where 30 percent were married before age eighteen (UNICEF 2019). As a direct consequence of child marriage, complications related to adolescent pregnancy are the leading cause of death for fifteen to nineteen year-old girls (World Health Organization 2018a). Early childbearing also impedes girls' educational attainment, which contributes to the gender gap in labor force participation and earnings.

Several reviews have analyzed interventions that reduce child marriage and early childbearing. A systematic review of interventions to prevent child marriage in LMICs suggests that economic interventions, such as cash transfers, tend to have a significant impact through reducing school-associated costs. In addition, interventions that focused directly on child marriage or on closely related structural factors, such as schooling, were more effective in changing the timing of marriage and childbearing compared to interventions with more narrowly defined goals, such as preventing HIV or improving sexual health (Kalamar, Lee-Rife, and Hindin 2016). A review on women's empowerment and fertility suggests that empowerment is associated with fewer children and fewer ideal number of children in the majority of studies. In particular, studies that used multidimensional measures to represent empowerment through composite scores, multi-item scales, or factor analysis, instead of individual items, were more likely to find consistent associations between women's empowerment and lower fertility (Upadhyay et al. 2014).

Interventions can prevent child marriage and early childbearing through multiple mechanisms. Since girls who have dropped out of school are more vulnerable to early marriage, increasing access to formal education is often considered an effective mechanism to give girls more options outside of marriage. Transfers, especially those conditional on schooling or increasing household income to offset other competing financial needs, give girls and their families more incentives to let girls stay in school, which may delay marriage and sexual activities. Similarly, skills training or access to employment opportunities may provide girls alternatives to entering marriage early. These interventions might also increase the earnings and economic status of young women, making them more competitive in the marriage market. In addition, information and trainings that change girls' beliefs or attitudes about marriage and childbearing may increase girls' "power within" to resist the pressure of marriage. However, whether they can exercise agency in these choices might be subject to social norms.

It is important to note that positive changes in marriage and childbearing outcomes may or may not reflect girls' exercising their agency, as these are important family decisions that might not be made by girls alone. In addition, cultural traditions and social norms may play such an influential role in marriage decisions that girls and young women with greater agency reflected in other indicators of agency would still find it difficult to resist the pressure of marriage or childbearing.

We review 22 papers that measure marriage and childbearing outcomes, including interventions that provide information, skills training, transfers, employment opportunities, and laws that protect women's rights. Given the review's focus on specific policies or programs that target women or girls, we excluded studies that assessed education as a socioeconomic characteristic or interventions that aimed to improve schooling for boys and girls alike.

Main Takeaways

- Overall, interventions that changed perceptions about girls' abilities and opportunities or increased the educational and economic opportunities available to them encouraged girls and young women to delay pregnancy.
- There is strong evidence that cash or in-kind transfers were effective in reducing child marriage and early childbearing among adolescent girls. Enabling girls to stay in school longer and increasing household income to alleviate families' economic pressure to marry girls early were two key mechanisms.
- In contexts where social norms allowed girls to have some control over their sexual relationships, providing access to health information changed girls' beliefs about the value of sexual behaviors and marriage, which in turn influenced marriage and childbearing outcomes.
- Adolescent girls' programs that provided skills training in a safe space had mixed impacts on child marriage and teenage childbearing despite positive effects on young women's economic empowerment. Improvements in life and/or soft skills appeared to be an important mechanism that empowered adolescent girls to make changes in domains where they could exert influence.
- Limited evidence from South Asia suggests that access to employment opportunities delayed marriage and childbearing, as adolescent girls stayed in school longer or joined the labor force.
- Limited evidence suggests that institutional changes through laws on minimum age for marriage, political gender quotas, and equal inheritance laws increased young women's age of marriage through protecting women's rights and changing attitudes about gender norms. Enhancing women's "power within" appeared to be an important mechanism.

There is strong evidence that cash or in-kind transfers were effective in delaying marriage and childbearing among adolescent girls by enabling them to stay in school. Evidence from four transfer programs in Kenya, Malawi, Pakistan, and Zimbabwe showed large impacts on marriage or childbearing if the gains in schooling were substantial (Baird et al. 2010, 2015; Hallfors et al. 2011; Alam, Baez, and Carpio 2011; Duflo, Dupas, and Kremer 2015). Providing comprehensive support (including school fees, uniforms, supplies, and teacher-helpers) to orphan adolescent girls in Zimbabwe reduced school dropout by 82 percent and child marriage by 63 percent after two years (Hallfors et al. 2011). Offering two free school uniforms to adolescent girls in Kenya reduced school dropout and had lasting effects on

childbearing seven years after the program initiation (Duflo, Dupas, and Kremer 2015). Based on a study using an RD and DID design in Pakistan, the Punjab Female School Stipend Program had sustained effects after four years of implementation, as girls aged 15-19 living in the stipend districts married more than 1.2 years later, and girls aged 17-19 had 0.3 fewer children, although the effect on fertility was only marginally significant. The researchers pointed towards the education pathway to explain these impacts, as the program helped girls progress through and complete middle school, which in turn enabled them to delay marriage and have fewer children (Alam, Baez, and Carpio 2011).

On the other hand, the effects of transfers on marriage and pregnancy might be limited without substantial gains in schooling. In Malawi, conditional transfers to girls who were out of school at program initiation substantially increased schooling, decreased the probability of early marriage by 11 percentage points from 28 percent, and decreased probability of ever becoming pregnant by 5 percentage points from 16 percent (Baird et al. 2010). However, the program had no effect on marriage or pregnancy among girls who were already in school at baseline (Baird et al. 2010), and the only large and sustained effects in marriage and childbearing five years after baseline were among girls who were out of school initially (Baird et al. 2015). According to the researchers, the two-year CCT that targeted the final years of primary school might have been too short or too late to cause a substantive change in educational attainment among the school girls.

In addition to the education pathway, there is moderate evidence that increasing household income and alleviating families' economic pressure to marry girls early through cash and in-kind transfers were effective in reducing child marriage and delaying childbearing. Evidence from two unconditional transfer programs in Kenya and Malawi suggested that increasing household income can be another mechanism to delay marriage and childbearing (Handa et al. 2015; Baird et al. 2015). In Kenya, UCTs provided to orphans and vulnerable children reduced the probability of pregnancy among young women aged 12-24 by 5 percentage points, while 19 percent of those in the control group had been pregnant four years after program initiation. The researchers showed that the additional income along with the education pathway explained the effects on pregnancy (Handa et al. 2015). UCTs provided to school girls in Malawi had sizeable effects on marriage and childbearing during and immediately after the program ended, reducing the probability of marriage and pregnancy by 8 and 6 percentage points from 18 and 25 percent, respectively. However, these effects were only temporary and the UCT did not change young women's fertility preferences. The researchers suggested that programs that target younger girls and last longer could have more permanent impacts (Baird et al. 2015).

Conditional transfers can target child marriage directly by loosening families' economic pressure to marry girls early, as demonstrated by a conditional incentive program in rural Bangladesh that delivered cooking oil to families with unmarried girls (Buchmann et al. 2018). The value of cooking oil was approximately US\$16 per year, designed to offset the amount by which dowry was estimated to increase for every additional year a girl remained unmarried. More than four years after the study completion, girls in communities targeted by the cooking oil incentive were 23 percent less likely to marry before the age of eighteen compared to girls in communities that did not receive any intervention. Providing incentives outside of the education system can also help reach the most disadvantaged girls, such as those already out of school (Baird et al. 2015; Buchmann et al. 2018; Handa et al. 2015).

In contexts where social norms allowed girls to have some control over their sexual relationships, providing access to health information changed girls' beliefs about the value of sexual behaviors and marriage, which in turn influenced marriage and childbearing outcomes. Interventions that provided school-based health education to adolescent girls to prevent HIV in Kenya had different impact on childbearing depending on the content of the message. Providing information on relative risks of HIV infection by partner's age reduced teen pregnancy by 1.5 percent points compared to the childbearing rate of 5 percent among girls that did not receive the information. By comparison, the national HIV/AIDS curriculum that advocated for abstinence until marriage did not have any impact on the likelihood of childbearing (Dupas 2011). Another study in Kenya suggests that the national curriculum that focused on risk reduction did not reduce overall teen pregnancy. However, the curriculum encouraged committed relationships, as it reduced out-of-wedlock pregnancy by 1.4 percentage points from 8 percent and increased the likelihood of marriage without pregnancy by 0.9 percentage point from 1.2 percent after five years (Duflo, Dupas, and Kremer 2015). These two studies suggest that in contexts where adolescent girls have some control over their sexual relationships, risk-reduction health information may reduce pregnancy by enabling girls to choose safer sexual behaviors.

Adolescent girls' programs that provided skills training in a safe space had mixed impacts on child marriage and teenage childbearing, despite positive effects on young women's economic empowerment. Five adolescent girls programs from Bangladesh, Ethiopia, Liberia, Sierra Leone, and Uganda led to a decrease in early marriage and/or childbearing (Bandiera et al. 2020, 2018; Amin et al. 2016; Stark, Asghar, et al. 2018; Özler et al. 2020). For example, the BALIKA project, a 18-month skill building program delivered by local young female mentors at safe spaces dedicated to adolescent girls, was effective in delaying child marriage in southern Bangladesh (Amin et al. 2016). In addition, there was no difference between the three training strategies tested: education-focused tutoring, gender-rights awareness training, or livelihood skills training.

On the other hand, four other adolescent girls' programs did not affect marriage or childbearing, including two ELA programs in Tanzania and South Sudan and two training programs through safe spaces in Bangladesh and Zambia (Buehren, Goldstein, et al. 2017; Buehren, Chakravarty, et al. 2017; Buchmann et al. 2018; Ashraf et al. 2020). The ELA program in South Sudan actually increased the likelihood of marriage by 13 percent compared to girls in comparison communities, which might be partially explained by girls' improved marriage prospects due to enhanced employment skills in a setting where early marriage is common (Buehren, Chakravarty, et al. 2017). For the ELA program in Tanzania, qualitative evidence suggests that the lack of any social or economic impacts might have been due to weak implementation as a result of resource constraints (Buehren, Goldstein, et al. 2017). For the *Kishoree Kontha*, or Adolescent Girl's Voice program in Bangladesh, researchers suggested that the empowerment program might have been more effective in reducing child marriage and teenage childbearing in contexts where young women were more in control of their marriage and fertility decisions (Buchmann et al. 2018).

Improvements in life and/or soft skills appeared to be an important mechanism that empowered adolescent girls to make changes in domains where they could exert influence. Qualitative evidence from the BALIKA program described above suggests that participating girls gained confidence to voice their opinions regarding the timing of marriage and choice of partners (Amin et al. 2016). In the ELA

program in Uganda, researchers showed that participation in life skills training, instead of livelihood skills training, was an important mediator for the intervention's lasting effects on marriage and childbearing (Bandiera et al. 2020). However, using new soft or life skills to influence marriage decisions may not always be within reach. In some settings, soft skills may enable girls to influence education or economic decisions rather than marriage decisions. This was illustrated by a six-session after-school program that provided negotiation training to girls in Zambia. Researchers showed that the strong intervention effects on educational outcomes three years later were largely attributed to girls' enhanced negotiation skills (Ashraf et al. 2020). Similarly, researchers found that the soft skills training in the *Kishoree Kontha* program in Bangladesh provided adolescent girls with tools for negotiation and enabled them to engage in income-generating activities, although the training did not lead to any change in the timing of marriage (Field, Glennerster, and Nazneen 2018; Buchmann et al. 2018).

There is limited evidence that access to employment opportunities delayed marriage and childbearing, as adolescent girls stayed in school longer or joined the labor force, based on two studies in South Asia. Providing recruiting services to help young women aged 15-21 get jobs in the business process outsourcing industry in rural India increased their schooling and participation in the labor market, which changed their fertility preferences and delayed marriage and childbearing (Jensen 2012). Similarly, a study using a DID design found that exposure to increased job opportunities in the garment sector in Bangladesh was associated with lower likelihood of early marriage and childbirth, due to older girls postponing marriage to work and younger girls staying in school (Heath and Mobarak 2015).

There is limited evidence that institutional changes through laws on minimum age for marriage, political gender quotas, and equal inheritance laws delayed marriage among young women through protecting women's rights. Enhancing women's "power within" appeared to be an important mechanism. A study using a DID design showed that the Revised Family Code 2000 in Ethiopia that increased the minimum age of marriage from fifteen to eighteen years was associated with an increased age of marriage among young women, likely because the law changed single women's expectations of their role within a marriage and expanded their economic opportunities (Hallward-Driemeier and Gajigo 2015). A study in India that used a DID design found that reserved seats for women in local government in rural India was associated with a 20 percentage point decline in the likelihood of child marriage and a 2.3 year increase in the age of marriage, such that the average age of marriage increased to nineteen (Castilla 2018). Drawing on previous literature examining the effects of the reserved seats policy (Beaman et al. 2012, 2009), the researcher proposed that changes in gender norms, including greater parental expectations and girls' own attitudes regarding women's autonomy over marriage, might be a potential mechanism (Castilla 2018). Another DID study in India found that the legal reform that granted daughters equal inheritance rights to family properties as sons increased women's land ownership, educational attainment, and age of marriage, pointing to broad impacts of legislative changes on women's socio-economic status (Deininger, Goyal, and Nagarajan 2010).

Taken together, the evidence we reviewed indicates that interventions that changed perceptions about girls' abilities and opportunities or increased the educational and economic opportunities available to them encouraged girls and young women to delay pregnancy.

Future Research

Future research should disentangle the multiple constraints that young women face to identify additional levers to enhance young women's agency in marriage and childbearing, taking setting and cultural norms into consideration. For example, in what contexts are adolescent girls' programs and empowerment trainings most effective? How does greater income-generating ability affect young women's life cycle choices across settings and contexts? More broadly, given the existing work by community organizations that engage key decision-makers at multiple levels, such as parents, prospective husbands, and community leaders, more rigorous evaluation of these efforts can inform interventions that address multiple constraints young women face in contexts where women have less control. Furthermore, while child marriage is a violation of human rights, early marriage and motherhood among consenting adults can be an expression of agency and choice. Young women may find meaning in motherhood and choose this life path early, particularly in settings where they perceive a limited opportunity set when it comes to education or work. Thus, more research is needed on the linkages between "power within" and marriage and childbearing patterns.

5.1.2. Contraceptive use

In 2018, 214 million women of reproductive age in developing countries who wanted to avoid pregnancy were not using a modern contraceptive method for reasons including: poor access to quality health services, opposition from male partners and other family members, and cultural and religious barriers (World Health Organization 2018b). Use of modern contraceptives reduces pregnancy-related health risks and mortality, helps to prevent HIV/AIDS, and allows women and girls to pursue education and career opportunities. Using contraception does not universally equate to an expression of agency. Yet, taking steps to attain one's desired number of children and determine the spacing of pregnancies is strongly related to women's and girls' ability to make informed choices about their sexual and reproductive health, which could have lasting effects on education and labor opportunities. For these reasons, we consider contraceptive use to be a useful proxy for women's agency and thus an indirect indicator of agency under this review.

Previous reviews have indicated that the key factors that influence women's use of contraceptives in LMICs include: women's education and employment, male partners' attitudes, and social/cultural norms surrounding fertility (Blackstone, Nwaozuru, and Iwelunmor 2017; Prata et al. 2017; James-Hawkins et al. 2018). Existing reviews have analyzed the effectiveness of different types of interventions on women's contraceptive use and identified both promising and less promising approaches (Kraft et al. 2014; Khan et al. 2016; Mwaikambo et al. 2011; Phiri, King, and Newell 2015). For example, a review of cash transfer programs suggests CCTs or UCTs could improve access to and uptake of family planning services by addressing financial barriers (Khan et al. 2016). Another review found that behavior and social change interventions that addressed gender dynamics had mixed effects (Kraft et al. 2014).

We excluded most studies on the effects of health education or provision of contraceptives, given the existing reviews and the large literature on contraceptive use in public health (Belaid et al. 2016; Polus et al. 2015; Sarkar et al. 2015; Bellows et al. 2016; Phiri, King, and Newell 2015). Instead, we focus on a few selected studies that emphasized women's control over sexual and reproductive choices.

Interventions that provided access to financial services or income may enhance women's economic status in the family, giving them the means to afford contraceptives and the power to choose their preferred methods. Since contraceptive use often involves both partners, interventions that target men may increase men's knowledge about contraceptive options and support of women's sexual and reproductive decisions. In addition, since male partners' disapproval is a main barrier to women's contraceptive use (Blackstone, Nwaozuru, and Iwelunmor 2017), interventions that are designed to give women more autonomy in the decision-making process might also help women achieve their family planning goals.

With a narrower scope than other indicators of agency, this section reviews eight studies, including interventions that provided family planning services, conditional transfers, microcredit, and gender-transformative interventions that engage men in their programming.

Main Takeaways

Giving women more direct control in family planning through providing privacy, life skills
training, or more options in contraceptive products or encouraging more gender-equitable
attitudes among men through male engagement interventions increased women's agency in
contraceptive use.

Programs that gave women more control in family planning decisions through providing privacy, life skills training, or more options in contraceptive products increased contraceptive use. A study in Zambia found that providing women with vouchers for contraceptives privately increased their likelihood of using family planning services by 10 percentage points above the 43 percent take-up rate when vouchers were provided to both spouses. In addition, among women who wanted to postpone childbearing but believed their husbands desired more children, providing vouchers to the couple reduced women's use of injectables, a concealable type of contraceptives, by 13.6 percentage points compared to a take-up rate of 28.4 percent when women were provided access privately (Ashraf, Field, and Lee 2014). These large effects suggests that private access to contraceptives in contexts where women have less decision-making power than men may be an effective means of enabling women to achieve their fertility goals, although the study also found suggestive evidence that concealing contraceptives from partners had adverse impacts on women's psychological well-being (Ashraf, Field, and Lee 2014). In addition, the Mexican CCT program *Oportunidades* increased women's contraceptive use, an outcome primarily driven by women who entered the program with low levels of autonomy in household and financial decision-making. Although the analyses did not support autonomy as the mediator for the effect of the CCT on contraceptive use, the researchers explained that the null effect on autonomy might be due to the limited sensitivity of autonomy measures (Feldman et al. 2009). Such efforts to increase women's autonomy in contraceptive use can target younger women or girls, as demonstrated by the ELA program in Uganda where providing life skills training enabled girls to make informed choices about sex and increased consistent condom use (Bandiera et al. 2020).

On the other hand, a study in Ethiopia found that providing family planning services and microcredit, alone or together, had no impact on women's contraceptive use. Researchers suggested that this is because the contraceptives provided in the program (pills and condoms) did not align with women's preferences (injectables) (J. Desai and Tarozzi 2011). Thus, it is important to note that women's

contraceptive needs are context specific; programs aimed to improve women's agency through health services provision need to understand and prioritize women's preferences to be effective.

A study in Mozambique illustrated a more nuanced relationship between women's autonomy and contraceptive use (Cassidy et al. 2018). Introducing female condoms, which were new to this setting and more preferable to men than male condoms, to women living in slums led to a substantial 7.7 percentage point increase (385 percent) in the proportion of women who had used female condoms in the previous thirty days. In particular, the strong take-up was driven by women who were having unprotected sex at baseline, instead of those who were using male condoms. The researchers suggested that since women's lower decision-making power in the household may constrain their contraceptive use, providing alternatives that are more acceptable to men may offer a second-best solution.

Encouraging more gender-equitable attitudes among men through male engagement interventions increased women's agency in contraceptive use. Men play an important role in women's contraceptive use. A recent review suggests that engaging male partners through health education aimed to change their beliefs or knowledge about contraception appears to be the most effective behavior change technique (Phiri, King, and Newell 2015). There is also suggestive evidence that more intensive interventions, which seek to change men's attitudes towards gender norms, may be effective in increasing women's contraceptive use. In Rwanda, the *Bandebereho* intervention targeted men and their partners through fifteen small group sessions of critical reflection and dialogue on topics such as power dynamics, IPV, and maternal and reproductive health. The program led to less male dominance in household decision-making, more equitable household division of labor, and greater contraceptive use based on both men's and women's reports sixteen months after the program ended (Doyle et al. 2018). Similar in content, the CHARM intervention in rural India offered family planning and gender equity counseling sessions to married men and their wives but only through three brief counseling sessions. This intervention also led to more equitable attitudes toward household decision-making among men and increased women's contraceptive use (Raj et al. 2016; Fleming et al. 2018).

However, providing men with family planning information might not always be effective in increasing women's contraceptive use. A study in Jordan found that providing family planning counseling either to women or to couples increased women's contraceptive use, but involving men did not lead to larger effects compared to the women-only counseling. This could be explained by the low rates of participation among men and the fact that women-only counseling encouraged women to communicate more with their male partners, which may have increased men's knowledge through spillover effects (El-Khoury et al. 2016). Taken together, the evidence emphasizes the importance of changing men's knowledge or attitudes, instead of mechanically including them in contraceptive decision-making, as a way to improve women's agency in contraceptive use.

Future Research

Future research should take a closer look at women's contraceptive preferences beyond the dichotomy of contraceptive use or not. For example, how can policymakers provide access to a broad mix of contraceptive methods that meets women's needs for spacing or limiting childbearing and their varied preferences for product features? How can access to contraceptives starting at a young age affects young

women's aspirations, health, education, labor force participation, and other dimensions of agency? Along the same lines, more research is needed to address supply-side factors that may affect women's agency in contraceptive use. For example, can mHealth tools support providers in helping women and girls make informed contraceptive decisions based on their needs and preferences? To what extent does cost-sharing and subsidies, especially for the relatively expensive long-acting methods, affect women's agency in contraceptive decisions?

How to effectively engage men in interventions aimed to improve women's agency is a priority topic for future research across indicators but especially needed in the literature on women's agency in contraceptive use. To encourage men's buy-in, interventions need to be designed carefully to consider men's needs in family planning, which may or may not align with women's preferences related to contraceptive methods and fertility goals. For example, while using concealable methods of contraception might allow women to achieve their immediate fertility goals against their husbands' will, temporarily hiding contraceptive use will not address spousal discrepancy in fertility preferences in the long run. More broadly, what approaches are effective in incentivizing men to participate in programs that are traditionally viewed as women's issues? How can community norms related to masculinity, health, and fertility start to shift? And ultimately, if programs can effectively engage men, to what extent would men's more active role in family planning affect women's agency?

5.2. Economic domain of agency

As outlined by Kabeer (2012), there are myriad definitions of women's economic empowerment. Nonetheless, many of them share commonalities related to "agency, choice, and decision-making in relation to markets." In particular, most conceptualizations of economic empowerment include elements of: contributing to and benefitting from labor markets, accessing economic resources, and making economic decisions. Theories related to economic empowerment also posit that increasing a woman's income can potentially function as a lever to increase her economic agency. As outlined by Laszlo et al. (2017), for example, a woman's ability to make choices or negotiate with other household members can be considered a direct function of her income relative to the other individuals.

We consider economic decision-making related to spending in the home to be a direct measure of agency which we covered in the household decision-making section. Participating in labor markets and growing income through entrepreneurship are two additional avenues through which women can gain or express agency, choice, and decision-making in the economic domain. Under this section, we review studies that measure outcomes related to women's labor force participation and income generation from entrepreneurship as two key indirect indicators of women's agency.

5.2.1. Labor force participation

Around the world, women participate in the labor force at much lower rates than men (48 percent compared to 75 percent, respectively) and women's participation has declined over the past two decades (International Labour Organization 2019a). This gap is not systematically bigger in lower-income

countries than higher-income countries, but self-reported attitudes about women's work are generally more restrictive in LMICs (Jayachandran 2015).

Female labor force participation is often considered a core aspect of gender equality and women's empowerment. The UNDP's Gender Inequality Index includes it as one of its three key indicators (United Nations 2018). Yet, female labor force participation in the aggregate tells us little about women's agency directly. Many women who work may not have had a choice and face unsafe working conditions or significant constraints in choosing their occupation. They may face barriers in earning equal pay or progressing into higher-paying management positions, or they may select into lower-return sectors. As outlined by Laszlo et al. (2017), labor market participation reflects the potential, though not definite, outcome of a woman's decision-making process and can thus be considered an indirect measure of women's agency.

While working is not perfectly correlated with agency, substantially lower rates of women's labor force participation, such as those seen in parts of the Middle East & North Africa (International Labour Organization 2019b) and South Asia (International Labour Organization 2019c), indicate that women lack agency in this domain. In many contexts, women's labor force participation is mediated by overlapping sets of sociocultural norms, such as expectations about men's and women's roles in income generation and household work, acceptability of women working outside the home and in mixed-gender workplaces, and concerns for women's 'purity' and safety (Jayachandran 2015). Whether these norms restrict women's work varies considerably even within countries, in urban vs. rural areas, and according to socioeconomic class, ethnicity, and religion. Beyond these norms, women may also face other constraints to working, such as a higher burden of unpaid care work, lack of access to affordable childcare options, safe and affordable transport to work, lack of connections or relevant skills valued in the labor market, and regulatory constraints that restrict economic opportunities for women.

In this section, we review 29 evaluations of programs intended to increase the proportion of women engaged in the labor market, including vocational skills training, job vouchers, information interventions, and policy reforms. As the informal sector makes up a large share of most LMICs' economies, the studies include both formal and informal employment, though many of the interventions are geared towards the former.

Main takeaways

- Providing women with access to recruitment services or jobs consistently increased women's employment in the short run, but may have mixed effects on direct indicators of agency.
- Several studies suggest that providing access to free or subsidized childcare increased women's labor market participation.
- There is strong evidence that CCTs did not discourage women's labor force participation.
- A small number of studies suggest that removing laws that restricted women's work or control over economic resources increased women's labor force participation.
- There is mixed evidence regarding the impact of vocational training programs targeting women on their employment in the short-run, with limited evidence that these effects persisted over time. Meanwhile, several studies suggest that adolescent girls' programs employing "safe space"

- models increased their self-employment into adulthood, and soft and/or life skills acquisition appeared to be an important mechanism.
- Since attitudes about female labor force participation can inhibit women's work, more evidence is
 needed on whether sharing information with women and their family members about the safety
 and benefits of work could increase women's labor force participation in settings where they face
 restrictions.
- Increasing access to microcredit or savings did not consistently lead to higher levels of entrepreneurship, suggesting limited impacts on women's employment.

Providing women with recruitment services or job opportunities consistently increased women's employment outside the home in the short term, although it did not consistently impact direct indicators of agency like "power within" or decision-making. Across four RCTs, several studies suggest that increasing women's access to job opportunities through randomly assigned job offers or recruitment services increased women's employment and earnings in the short run. However, only two studies—one in Ethiopia (Kotsadam and Villanger 2019) and one in India (Jensen 2012)—found that these effects persisted a year or more after the program. In Ethiopia, randomly assigning factory job offers to women led to large increases in employment and earnings that were sustained at least 1.5 years after the job offer (Kotsadam and Villanger 2019). In India, providing recruitment services for jobs in the business process outsourcing industry increased young women's employment in that sector by 4.6 percentage points and the likelihood of young women working outside the home for pay by 2.4 percentage points after three years (Jensen 2012). In contrast, in Jordan, a six month youcher for a minimum wage job did not increase young women's employment after the subsidy ended, potentially because firms could not afford to keep young women on as employees (Groh et al. 2012). In another RCT in India, providing women with a job offer in carpet manufacturing led to large increases in their employment and earnings four months later, but the author did not report longer-run results (Mckelway 2018). Overall, there is limited evidence on whether and how long employment effects persist.

Furthermore, as outlined in previous sections, access to recruitment services or job offers did not consistently increase direct indicators of women's agency, suggesting that the effects of employment alone may be limited in these domains. Only the two studies in India found positive effects on direct agency indicators, specifically women's aspirations and views about themselves. Four months after receiving a job offer in carpet manufacturing, women in Uttar Pradesh had substantially higher generalized self-efficacy, suggesting that in contexts with restrictive norms about women's work, women's self-efficacy may be low because they lack experience working (Mckelway 2018). Another study found that increasing awareness about jobs and wages available to women, along with access to recruiters for the business process outsourcing industry, substantially changed young women's aspirations regarding work, even among women who did not take up the free recruiting services and long after marriage and childbirth (Jensen 2012).

Many household bargaining models posit that women's agency is likely to increase when they earn or have the potential to earn a larger share of household income relative to their partners, spouses, or other family members. However, earning more income may not be enough to change household decision-making or power dynamics. In Ethiopia, giving women factory job offers did not change their say in household decisions, including those related to child health, child schooling, outside employment, and

household spending (Kotsadam and Villanger 2019). The program reduced the emotional abuse women experienced for several months but did not decrease physical abuse or shift gender attitudes. In Jordan, researchers found the temporary job voucher program had no impact on direct indicators of agency or gender attitudes (Groh et al. 2012).

Several studies suggest that providing free or subsidized childcare increased women's labor force participation. Three randomized evaluations of free or subsidized childcare found that it increased women's labor force participation and one found that it increased women's income. The positive effects on employment were concentrated among women who were not working before, suggesting that a lack of childcare prevented women from pursuing labor force opportunities. A study in Brazil found that providing access to free government childcare services generated a large increase in mothers' employment and a small increase in household income (de Barros et al. 2011). In Kenya, providing subsidized early childcare to mothers living in a Nairobi slum increased employment by 8.5 percentage points (Clark et al. 2019). In particular, it allowed single mothers who were already working to cut back on working extended hours without any loss in wages by shifting to jobs with more regular hours (Clark et al. 2019). In a study using a triple differences design, researchers found that women's labor force participation in Indonesia increased by 7.4 percentage points if they were exposed to an additional public preschool per 1,000 children, but private preschools had no effect on women's work (Halim, Johnson, and Perova 2019). Providing free after-school care for children aged 6-13 also increased women's labor force participation and employment in Chile, a high-income country, and increased the use of daycare for young children who were ineligible for the program, suggesting that women needed childcare for all of their children in order to join the labor market (Martínez A. and Perticará 2017). These studies suggest that a lack of access to affordable childcare is a key barrier to women's agency in the labor market and that providing free or subsidized childcare is promising way to increase women's labor force participation.

There is strong evidence that CCT programs have not discouraged women's labor force participation in LMICs. Program features and eligibility requirements should be careful not to discourage women's work. Across seven RCTs of large government CCT programs in Honduras, Indonesia, Mexico, Morocco, Nicaragua, and the Philippines, only one found a decrease in women's employment (Honduras PRAF) and none decreased the hours women worked (Banerjee et al. 2017). A quasi-experimental study of a national CCT program in Colombia also found no effects on women's employment (Lopez-Arana et al. 2016). In a study using an RD design in Uruguay, CCTs decreased women's likelihood of registering themselves as having formal employment. However, the program did not decrease total hours worked, indicating that women were still working informally (Bergolo and Galván 2018). The authors note that CCT eligibility requirements may discourage women's work if they overemphasize women's reproductive roles as caretakers (Bergolo and Galván 2018). Based on a study using an RD and DID design in Pakistan, CCTs for girls' education increased girls' education, delayed marriage and childbearing, and decreased work, because girls stayed in school longer (Alam, Baez, and Carpio 2011). When exercising agency, women may choose education over work.

There is limited evidence that removing legal restrictions that discriminate against women working or controlling economic resources increased their labor force participation. Two quasi-experimental studies of legal reforms in Ethiopia and India found that removing legal barriers to work and

owning/inheriting property seem promising to increase women's agency in work. Using a DID design to measure the impact of the Revised Family Code in Ethiopia, researchers found that removing legal restrictions on women working outside the home, increasing the legal age of marriage to eighteen, and expanding women's access to marital property increased women's work outside the home and ability to get full-time paying jobs. The positive effects were particularly strong among young, unmarried women, who married later either as a result of the increase in the legal marriage age or greater economic opportunities (Hallward-Driemeier and Gajigo 2015). Using a DID approach, another study found that the enactment of an equal inheritance law in India increased Hindu women's employment, education, and investment in daughters (Sapkal 2017).

There is mixed evidence regarding the impact of vocational training programs targeting women on their employment in the short run, with limited evidence that these effects persisted over time.

Three out of the five studies on training programs targeting young women found positive impacts on women's employment and earnings in the short run in Liberia, Nepal, and Kenya, but not in Jordan or Haiti (Adoho et al. 2014; Chakravarty et al. 2019; Rodella, Cuevas, and Atuesta 2015; World Bank and International Youth Foundation 2013; Groh et al. 2016). Only two studies measured whether these effects persisted one year after the programs ended (Chakravarty et al. 2019; Groh et al. 2016), with the other three measuring effects three to six months after they ended (Adoho et al. 2014; Rodella, Cuevas, and Atuesta 2015; de Azevedo, Davis, and Charles 2013). Therefore, there is limited evidence on whether effects on employment persisted. Most of the programs included a mix of technical and soft/life skills training in a classroom setting and provided women with job placement services or a paid internship with potential employers after the training. Several of the programs compensated young women for their time and/or transportation, while they were participating in the training, to reduce dropout.

Two of the programs that increased employment took place in settings with less restrictive norms about women working according to the researchers. In a study in Kenya, training in either Information Communications Technology (ICT) or ICT plus life skills, paired follow-on job placement support, increased young women's likelihood of obtaining a job and their weekly income six months after the program ended (de Azevedo, Davis, and Charles 2013). Another study in Liberia found that a government program that provided young women in Monrovia with six months of classroom-based training in either job or business development skills led to large increases in employment and earnings for young women six months after the training ended (Adoho et al. 2014). The gains were particularly large for the business development track, likely because formal jobs were scarce in this setting and most people were employed in the informal sector. The young women in this program had above average education and assets, the majority were not married, and they reported high levels of autonomy and decision-making power at baseline.

As noted in previous sections, only the studies in Haiti (Rodella, Cuevas, and Atuesta 2015) and Liberia (Adoho et al. 2014) reported results on direct measures of women's agency. Both studies found positive effects, at least in the short run. There were not strong norms restricting women's ability to work in either context. In Liberia, job and business skills training increased young women's control over the money they earned (already high at baseline), improved their life satisfaction related to work, and led them to worry less (Adoho et al. 2014). In Haiti, while the training program did not increase employment, it increased

young women's autonomy in personal spending, mobility, standing in relation to other family members, and non-acceptance of IPV (Rodella, Cuevas, and Atuesta 2015).

Using an RD design, one study also found similar positive impacts on women's employment and earnings in Nepal, a setting with more restrictive norms about women working (Chakravarty et al. 2019). In this context, a program that provided young, low-income women in rural areas with technical, on-the-job, and life skills training significantly increased women's non-farm employment, hours worked, and earnings one year after the program, though these increases became insignificant after two years. The one-year impacts were driven by a subset of women who started small informal businesses inside their homes as tailors or beauticians. The authors suggested that the program enabled these women to run businesses inside their homes so that women could continue their household chores and earn money while adhering to norms restricting women's ability to work outside the home (Chakravarty et al. 2019). Young married women in southwestern Bangladesh employed similar strategies to earn an income, choosing businesses that they could run inside their homes like tutoring and tailoring. In qualitative interviews, women reported going above and beyond to please their in-laws and husbands to negotiate their ability to work (Field, Glennerster, and Nazneen 2018). Choosing work that adhered to social and cultural norms was a strategy women used to exercise agency amidst constraints in both contexts.

Training may increase young women's desire to continue education rather than begin working. In Haiti, providing hard and soft skills training plus a one-month internship to young women did not increase their participation in income-generating activities. However, the program did increase their aspirations to pursue further education, potentially explaining the null effect on labor force participation and also potentially indicating increased agency (Rodella, Cuevas, and Atuesta 2015). In another RCT in Jordan, Groh et al. found that a classroom-based soft skills training targeted to female community college graduates had no impact on employment four months after the program, though it did improve young women's outlook for the future. The authors hypothesized that the training had no effect on employment because it was either too short to produce substantial changes in skills or lack of skills was not the key constraint to young women finding a job in this context, which instead may be related to broader constraints to firm growth and lack of jobs (Groh et al. 2016).

Technical trainings may have impacts on women's labor without specifically targeting women. An evaluation of conservation farming trainings in Zambia with a DID design found that the training was associated with an increase of one hour per day in female labor hours due to the fact that conservation farming is a more gender-neutral technology in terms of physical brawn (Carney and Carney 2018). In addition, two randomized evaluations of vocational training programs that targeted both young men and women in Colombia and the Dominican Republic had positive effects on women's employment and skills but not on men's (Acevedo et al. 2017; Attanasio, Kugler, and Meghir 2011).

More research is needed on the impacts of self-efficacy training, as one study in India identified large, positive results on women's employment. A nine-session group-based psychosocial training, in which women identified their strengths, goals, and paths to achieve them and learned about job opportunities in carpet manufacturing, increased women's employment by 6.1 percentage points, potentially because women used the skills they learned to persuade family members to allow them to pursue paid work (Mckelway 2018). Interestingly, researchers found that job offers also increased

women's generalized self-efficacy, offering evidence that exclusion from employment may dampen women's "power within," which establishes a vicious cycle of low self-efficacy and low employment.

Several studies suggest that adolescent girls' programs employing "safe space" models increased their self-employment into adulthood, and soft and/or life skills acquisition appeared to be an important mechanism. As outlined in the "power within" section, six studies evaluated adolescent training and safe space programs on their subsequent self-employment. Four evaluated BRAC's ELA programs, which combined vocational and soft/life skills training in Uganda (Bandiera et al. 2020); Tanzania, which also included microcredit (Buehren, Goldstein, et al. 2017); Sierra Leone (Bandiera et al. 2018); and South Sudan (Buehren, Chakravarty, et al. 2017). The other evaluations studied two empowerment programs (*Kishoree Kontha* and BALIKA) for adolescent girls in Bangladesh that were designed to decrease child marriage (Buchmann et al. 2018; Amin et al. 2016). All of these programs offered a "safe space" model where adolescents had a local space to meet multiple days per week after school, supervised by local peer leaders, and learn new skills.

In Uganda, the ELA program increased young women's likelihood of engaging in income-generating activities by 4.9 percentage points four years after the intervention ended, a 49 percent increase over baseline levels (Bandiera et al. 2020). In South Sudan, while the program increased the likelihood of being engaged in an income-generating activity by 9.6 percentage points among girls in unaffected areas (from 68 percent to 77 percent), it did not lead to improvements for girls living in conflict-affected areas (Buehren, Chakravarty, et al. 2017). In areas of Sierra Leone affected by the Ebola crisis, access to the ELA program allowed girls to combine school and work, while reducing the likelihood for girls to focus exclusively on income generation. However, these effects were not observed in areas of Sierra Leone less affected by Ebola, and the reason for this somewhat puzzling pattern is unclear (Bandiera et al. 2018). In Tanzania, the program did not impact economic outcomes, which researchers attributed to implementation problems (Buehren, Goldstein, et al. 2017).

In Bangladesh, *Kishoree Kontha* increased the likelihood of adolescent girls being engaged in incomegenerating work by 79 percent (Buchmann et al. 2018). Qualitative analysis revealed that providing adolescent girls tools for negotiation through soft skills training programs seemed to have been an effective strategy to help them overcome barriers related to income-generating activities (Field, Glennerster, and Nazneen 2018). Similarly, the BALIKA program increased the proportion of young women earning an income, when it included gender awareness and livelihoods training. The study also found that the number of hours young women worked did not change, yet their reported earnings increased (Amin et al. 2016).

Since attitudes about female labor force participation can inhibit women's work, more evidence is needed on whether sharing information with women and their family members about the safety and benefits of work can increase women's labor force participation in settings where they face restrictions. Two studies in India tested these kinds of interventions. One found positive effects on women's employment and earnings, while the other found none. In Uttar Pradesh, promoting carpet manufacturing job opportunities to women's families increased women's employment and earnings in the short run (Mckelway 2018). Combining this intervention with the equally successful self-efficacy training, however, led to no additional increases in employment or earnings. Promoting jobs to women's

families also had the unintended side effect of leading family members to assert control over money women would earn in the program (Mckelway 2018). In Karnataka, employer-led, family-orientation videos and discussions about the benefits and safety of women's employment had no effect on their employment, women's own attitudes towards employment, or family members' attitudes. Unlike McKelway (2018), they find that similar light-touch, employer-led interventions might not be enough to shift work-related gender norms and more sustained community action may be required for broader norms change (Dean and Jayachandran 2019). A promising area for future research is to identify the program features and delivery models that make these types of information interventions more likely to work in various contexts with more restrictive norms about women working.

Increasing access to financial services through microcredit or savings did not consistently lead to higher levels of entrepreneurship, suggesting limited impacts on women's employment.

As outlined in existing reviews of microcredit and savings groups interventions (Gash 2017; Loiseau and Walsh 2015), providing access to microfinance services has mixed impacts on business creation, suggesting limited impacts on women's employment overall. For example, two evaluations in this review found that microcredit access had no impact on business creation in India or Mexico (Banerjee, Duflo, Glennerster, et al. 2015; Angelucci, Karlan, and Zinman 2015). One study in Macedonia only found increases in entrepreneurship among women who received access to group loans rather than individual loans (Attanasio et al. 2015). Among studies in this review that evaluated either savings groups or VSLAs and also measured business creation, one evaluation on Mali found no impacts (Baro et al. 2013). Meanwhile, research in Malawi found marginally significant evidence that the average number of businesses operated by women with access to savings groups increased slightly; analysis in Ghana, Malawi, and Uganda also identified a modest increase in the average number of businesses (Ksoll et al. 2016; Karlan et al. 2017).

Future research

On the supply side, many existing approaches to enhance women's labor force participation are centered on providing women with access to resources or skills, with mixed results. The relative benefits of life/soft skills versus technical skills training remain an open question, along with better understanding the relationship between women's internal barriers (e.g., self-efficacy) and labor force participation. Better understanding the linkages between women's work and public infrastructure, transportation, mobility, and public safety are other priorities. Directly challenging and changing attitudes about women working is another understudied area. In contexts where spouses and parents can prevent women from working, how can family members best be engaged? More research on how to reduce women's time spent on unpaid care and domestic work should be prioritized, which may also involve working with family members.

Another fruitful area for future research is how to best engage employers on the demand side of women's work. Information interventions targeting employers can improve women's labor market outcomes, as there is evidence that employers evaluate men and women candidates differently (Gallego, Larroulet, and Repetto 2018; López Bóo, Rossi, and Urzúa 2013; Beaman and Dillon 2018). For example, in a set of RCTs in South Africa, encouraging job seekers to obtain a standardized reference letter from a former employer significantly improved employment rates for women after three months. Women were more

likely to use the reference letters, "consistent with the idea that groups who feel in a position of disadvantage are more likely to welcome additional tools to prove their ability" (Abel, Burger, and Piraino 2018). These types of interventions may improve equity in hiring in settings where employers have limited information about applicants and reference letters are not the norm. They may also provide less well-connected groups (often women and minority groups) a channel to connect to job opportunities in settings where employers hire through informal referral systems. Other important areas for research along these lines are how to relieve barriers women face in promotion, professional development, workplace harassment, and getting higher wage work. Identifying the drivers of occupational sex segregation is another research priority.

Future research must also take heterogeneity into account. Women's labor force patterns differ by region and country, based on current and historical female labor force participation levels, wage labor options, and the prevalence of agriculture, among other elements. Discrimination and bias experienced by women at the workplace may also vary according to ethnicity, caste, class, etc.

5.2.2. Income generation from entrepreneurship

As of 2019, women's average global income was about \$11,000 (in Purchasing Power Parity) compared to US\$21,000 for men (World Economic Forum 2019). Among the self-employed, which comprise 55.5 percent of the labor force in LMICs (International Labour Organization 2019d), lack of capital, liquidity, and business skills are considered fundamental constraints to increasing earnings and income. In addition, women face unique disadvantages to growing their incomes. For example, only 59 percent of women in LMICs have access to bank accounts, compared to 67 percent of men, limiting their access to vital financial resources (Demirgue-Kunt et al. 2018).

A woman's ability to make choices or negotiate with other household members can be considered a direct function of her income relative to the other individuals (Laszlo et al. 2017). At the macroeconomic level, there is a correlation between GDP per capita and a woman's self-reported ability to participate in household decisions (Jayachandran 2015). Yet, factors like restrictive cultural norms, male backlash, and women's own lack of self-esteem and self-efficacy can counteract positive gains from increases in relative income. As such, we consider income generation from entrepreneurship to be an indirect, rather than direct, indicator of women's economic agency (Laszlo et al. 2017).

We review 46 evaluations of programs intended to increase women's income-generating ability, including financial services, such as microcredit and savings groups, along with business skills training programs. Where possible, we reference metrics that directly measure income. We also reference outcomes related to business activity, such as earnings, business profits, or household consumption, which is often used as a proxy for income. While income, earnings, business activity, and consumption may not fully reflect women's economic agency, these outcomes offer a proxy for a woman's enhanced financial position within the household and speak to her position within markets, both key ingredients in economic empowerment.

Main takeaways

- While access to various savings and credit interventions had small positive effects on women's income-generating ability, the effects were modest and not transformative for income generation.
- There is strong evidence that the impacts of microcredit or business grants on microenterprises were moderated by gender norms and household dynamics in many contexts, potentially explaining some of the lack of transformative impacts on income generation.
- Business training programs varied greatly in program design and had mixed impacts on earnings.
 Successful programs often included content on gender equality or addressed gender-specific constraints, such as agency, soft skills, or social networks.
- There is strong evidence that the Graduation program led to sustained increases in women's income; the multicomponent approach appeared to be critical to the program's success.

While access to various savings and credit interventions had small positive effects on women's income-generating ability (measured through income level, business activity, or proxied through household consumption), the effects were modest and not transformative for income generation. As documented in previous reviews of microcredit interventions (Loiseau and Walsh 2015) and women's empowerment interventions (Buvinic and Furst-Nichols 2014), providing women with access to microcredit had small positive economic outcomes that were typically not transformative for income generation. In Mexico, for example, the expansion of a microfinance institution with a group-lending model led to a 27 percent increase in revenue and a 36 percent increase in expenses, yet this did not translate to any increase in income (Angelucci, Karlan, and Zinman 2015). In India and Mongolia, access to joint liability microloans led to increases in women's entrepreneurship; and in Mongolia, this also increased household food consumption (Banerjee, Duflo, Glennerster, et al. 2015; Attanasio et al. 2015). However, access to individual lending (as compared to joint lending) in Mongolia did not lead to any impacts on entrepreneurship or household consumption (Attanasio et al. 2015).

In India, offering longer repayment periods for microcredit did not lead to increases in business profits for women-owned businesses, though it did increase total household income (Bernhardt et al. 2019). In Uganda, loans of around US\$200 did not have an effect on women's profits; however, men's business profits increased due to access to the loans in the short run but not the long run (Fiala 2018b, 2018a). Both of these studies identified that household dynamics played a factor, which is outlined further below.

Some studies of microcredit programs for women didn't evaluate business activity but measured other proxies for income, such as household consumption or concepts related to women's financial stability and resilience. Once again, the results were mixed. A study using an RD design in Nigeria found that access to individual microcredit led to moderate reductions in household vulnerability (including household assets, frequency of child labor, food shortages in the household, health service demand, and shocks) (Ikenwilo et al. 2016). In South Africa, women with access to microcredit were 3.65 times as likely to be able to meet basic needs and 1.29 times as likely to have household assets above US\$300 relative to the comparison group, though there were no significant impacts on food security (Kim et al. 2009). However, in India, an evaluation of a government program offering microcredit through SHGs found that the program did not lead to impacts on consumption (Hoffmann et al. 2017).

Savings groups, SHGs, and VSLAs are intended to support participants in accumulating lump sums for consumption smoothing or productive investments. As outlined in other reviews (Brody et al. 2017; Gash 2017), savings groups, SHGs, and VSLAs have led to positive but modest outcomes for women with access to the programs, as measured through business operations, income, or household consumption. Several studies included in this review also identified a range of positive outcomes directly related to: business activity in Malawi, Ghana, and Uganda (Karlan et al. 2017); or consumption in Malawi (Ksoll et al. 2016), Mali (Baro et al. 2013), the Democratic Republic of Congo (Bass et al. 2016) and Burundi (Annan et al. 2013). For example, in Burundi, access to VSLAs ultimately led to a 14 percent reduction in poverty, along with a 22 percent increase in average per capita consumption expenditures from a base of US\$32 for the comparison group, and increased an asset index score roughly equivalent to one extra head of cattle for each household who participated in the VSLA (Annan et al. 2013). Nonetheless, not all results have been uniformly positive. Two evaluations of SHGs in India found that women's SHGs, which included group savings programs, did not lead to any increases in income (R. M. Desai and Joshi 2013; Prillaman 2017).

There is strong evidence that the impacts of microcredit or business grants on microenterprises were moderated by gender norms and household dynamics in many contexts, potentially explaining some of the lack of transformative impacts on income generation. Six evaluations included in this review offer evidence to support this finding (Said et al. 2019; Fiala 2018b; Bernhardt et al. 2019; Riley 2018; E. P. Green et al. 2015; Dupas and Robinson 2013). Researchers analyzed how household dynamics moderated the impacts of grants or microloans designed to relieve capital constraints for women microentrepreneurs in India, Ghana, and Sri Lanka (Bernhardt et al. 2019). In India, they found that providing longer grace periods before loan payment led to an 81 percent increase in business profits among women-owned businesses relative to the comparison group, but only when there were no other businesses in the household. Women in households where there were multiple businesses did not experience any changes in profits on average (Bernhardt et al. 2019). In Ghana, microenterprise owners were offered business grants in cash (approximately US\$120) versus in-kind (inventory, raw goods, or physical equipment). Approximately three years later, neither the cash nor in-kind grants had impacts on women's average business profits, yet the in-kind grant led to large increases for female-owned firms which were initially more profitable. In contrast, men experienced similar, but statistically insignificant, impacts from both the cash and in-kind grants (Fafchamps et al. 2014).

In Sri Lanka, microentrepreneurs were offered cash or in-kind grants (either US\$100 or US\$200 in cash or materials). The cash and in-kind grants led to large increases in business profits for men but not for women, and compared to men, women invested less of the US\$100 grant into their businesses but more of the US\$200 grant. One potential explanation was that women with access to the larger grants were able to invest in larger assets that were easier to protect from other household members (de Mel et al. 2009). Taken together, these findings suggest that businesses owned by women in households with multiple businesses benefited less from capital injections than those owned by women who were the sole business owners, because women's capital was invested into their husbands' enterprises. Women may have been optimizing by investing in the most profitable business in the household, or they may have been subject to gender norms that led them to sort into low-return sectors (Bernhardt et al. 2019).

Five other studies offer support for the finding that intra-household dynamics and gender norms moderate the impacts of access to capital on business outcomes. An evaluation of microcredit loan disbursements by BRAC Uganda found that women who received microfinance loans through mobile money accounts had 10 percent higher monthly business profits (above US\$152 in the comparison group) eight months after receiving the loan compared to women who received cash loans, even though many of the women receiving cash loans still had mobile money accounts. Women who experienced more pressure to share money with other members of the household experienced larger impacts, suggesting that the mobile disbursements offered a way to protect funds from household pressures and reap higher business profits (Riley 2018).

Furthermore, a program in Pakistan, which offered start-up loans and training to women entrepreneurs, led to a 17.7 percentage point increase in women's likelihood of setting up business above 14.7 percent in the comparison group, but women were also 17.9 percentage points more likely to shut down a new business, resulting in no net increase in female business ownership (Said et al. 2019). The study found that both men and women preferred that women operate businesses within the home rather than work outside the home. Likewise, women in the study often chose to receive business advice from their partner rather than an outside expert, even when the expert advice was free. The evaluation concluded that gender norms related to interacting with people outside of the household limited the success of women-owned businesses in Pakistan (Said et al. 2019).

As cited previously, male entrepreneurs in Uganda increased business profits in the short run as a result of being offered loans averaging US\$200 along with business training; however, none of the interventions had an effect on women's profits (Fiala 2018b). Participants also played a follow-up lab-in-the-field game where the participant could choose either to keep approximately US\$1.5 for themselves or to share roughly double that amount with their spouse. Women who hid money from their spouses had positive economic outcomes from the intervention, while those who did not hide money had negative outcomes. Researchers suggested that women may resort to hiding their money in order to retain control and prevent husbands and other family members from appropriating their resources (Fiala 2018a). In post-conflict Uganda, women with access to the WINGS program (business training, a start-up grant of US\$150, and technical support) doubled their earnings from US\$7.15 to US\$15.25. However, the quality of women's relationships with intimate partners was an important determinant of economic success, as the gains in earnings did not apply to women who reported that their partners did not treat them well (E. P. Green et al. 2015). These studies provide additional evidence on the role of intrahousehold relationships in moderating the impacts of financial resources for women.

Finally, an evaluation studied the impact of providing access to bank accounts among men and women in Kenya. The savings accounts had no opening fees, but offered no interest rates either, and it was expensive to withdraw funds, amounting to an expensive option for saving. Access to the accounts increased total savings among women market vendors and also led to a substantial positive effect on average daily business investments relative to women in the comparison group. Meanwhile, few men with access to the accounts (most of whom were taxi drivers) used their accounts and experienced no impact on savings or other business outcomes. Potential explanations for the differential impacts between men and women included that: women may have experienced heightened social pressures to share resources, or there may have been differences in time-inconsistency preferences (Dupas and Robinson 2013).

Business training programs had mixed impacts on earnings and there was wide variation in program design. Successful programs often included content on gender equality or addressed gender-specific constraints, such as agency, soft skills, or social networks. Previous reviews have identified that business practices are important for microenterprise growth and profits (McKenzie and Woodruff 2015). Yet, there is limited policy-relevant evidence on what is effective business trainings for entrepreneurs (McKenzie and Woodruff 2014). This review complements these previous analyses by focusing on trainings that target women microentrepreneurs, considering how gender relations and dynamics may interact with the success and implementation of business trainings, and evaluating whether gender-specific training materials make a difference.

Among the six standard business training programs evaluated, three were not effective in increasing business profits for women in Peru (Karlan and Valdivia 2011), Uganda (Fiala 2018b), and Kenya (Brooks, Donovan, and Johnson 2018). In Uganda, for example, adding the International Labor Organization's Start and Improve Your Business modules to either business grants or loans did not lead to any additional gains in business profits for women (Fiala 2018b). Nonetheless, three standard business trainings that we reviewed were effective, particularly for certain subgroups of women. In urban Sri Lanka, women were offered a business training program with or without a business grant. The nine-day business training offered different content for women entrepreneurs depending on if they were starting a new business or improving an existing one. The training alone had no impact for women with existing businesses, yet for women starting a new business, the training increased incomes by 30 percent (approximately US\$12.97) two years later (de Mel, McKenzie, and Woodruff 2014). A standard and intensive 48-hour business training in rural Mexico that focused on practical business applications led to sustained impacts on women's business profits, particularly among the highest-quality entrepreneurs (Giorgi, Cunha, and Calderon 2018).

In India, low-income self-employed women were invited to a two-day business and financial literacy training, which also included a goal setting component. Women who attended the training with a friend doubled their demand for business loans, compared to women who did not attend with a friend, which led to increases in business activity and household income. Results were concentrated among women constrained by more severe social restrictions. Upper-caste women who received training were more likely to take out a loan within four months and to expand sales than upper-caste women who received no training. However, the training did not seem to help Muslim women, who may have been so highly restricted that they could not start businesses at all, or scheduled-caste women, who faced fewer restrictions on social interactions. Researchers concluded that inadequate peer support may be a factor limiting some women entrepreneurs (Field et al. 2016).

We also reviewed six evaluations of training programs that combined standard business training material with additional training content on topics such as women's self-confidence, gender equality, or agency. Five out of the six evaluations had some impacts on women's business profits or earnings (Bulte, Lensink, and Vu 2017; Valdivia 2015; McKenzie and Puerto 2017; Shankar, Onyura, and Alderman 2015; Alibhai et al. 2019). Two separate programs in Kenya and Peru offered women entrepreneurs a gender-focused business training that included elements such as gender equality, self-esteem, and soft skills, with or without, technical assistance in Peru or mentoring in Kenya (Valdivia 2015; McKenzie and Puerto 2017). In Peru, access to the training increased women's sales seven to ten months after the

treatment, but nineteen to 25 months later, the effects only lasted during normal or slow months, not during good months (Valdivia 2015). In Kenya, women with access to the trainings experienced an increase in weekly profits of 15.4 percent, or US\$2.63, above the comparison group's profits three years after the intervention (McKenzie and Puerto 2017).

Also in Kenya, women with access to an agency-based empowerment training were nearly three times more likely to be an active cookstove seller than women who participated in the standard entrepreneurial training, indicating that increasing women's agency was an important factor in generating higher sales (Shankar, Onyura, and Alderman 2015). In Ethiopia, mindset-oriented business trainings for women entrepreneurs that addressed self-confidence were effective in Mekelle but not in Addis Ababa due to the implementation details and service delivery. However, by the second year, profit increases in Mekelle were no longer statistically significant (Alibhai et al. 2019). In Vietnam, a training for microentrepreneurs with sessions on gender, entrepreneurship, equality, and women's self-confidence, along with standard business skills content, increased total profits by around 30 percent, amounting to US\$70 over the course of a year (Bulte, Lensink, and Vu 2017). As outlined in the IPV section, researchers found that access to the program also increased IPV (Bulte and Lensink 2019).

Nonetheless, one program designed to address women's soft skills only was not effective in enhancing women's business outcomes. In rural Mexico, women entrepreneurs who were clients of a microcredit bank were provided access to a training that emphasized hope and aspirations but did not include any elements of traditional business skills. A follow-up survey implemented five weeks after the intervention found that the program increased aspirations but not other measures of agency, such as self-efficacy, or business performance (Lybbert and Wydick 2016).

Among the studies reviewed here, business training programs that were effective in increasing women's business outcomes often included gender equality material or addressed constraints that women entrepreneurs might disproportionately face, such as social network or soft skills asymmetries. Meanwhile, programs with standard business curriculums were typically not effective. Yet, only one study tested a standard business training compared to a gender-specific training. Due to the bundled nature of the interventions, it was hard to disentangle the effects of different program components. As outlined above, the WINGS program in post-conflict Uganda provided business training, a startup grant of \$150, and follow-up technical support. A random subset of women received the grant with a different framing called W+, under which women were encouraged to share the grant with the household. The program stressed joint financial decisions to reduce tensions and risks for IPV. Women were also provided with an additional training session on constraints to women's entrepreneurship, communication, and problem-solving with household partners. While the standard WINGS model doubled women's earnings on average, W+ actually led to a marginally significant decrease in the proportion of women engaged in business, although it did improve marital relationships. The researchers concluded that the dosage should potentially be higher (E. P. Green et al. 2015). These findings indicate that more research is needed on business skills training programs for women microentrepreneurs that address gender-specific constraints.

The Graduation approach led to sustained increases in women's income. The multicomponent approach appeared to be critical to the program's success. The Graduation approach is an intensive

multicomponent model designed to provide ultra-poor women with a "big push" out of poverty. Evaluations of the Graduation approach found that the program led to sustained positive changes in income and/or consumption in Afghanistan, Bangladesh, Ethiopia, Ghana, Honduras, India, Pakistan, and Peru (Bedoya et al. 2019; Banerjee, Duflo, Goldberg, et al. 2015; Bandiera et al. 2017). The four-year follow-up in Bangladesh found that the program enabled women to have more agency in their work decisions. Women with access to the Graduation program were able to allocate more time away from casual labor, working informally and infrequently as maids, towards livestock raising, a more productive option, leading to a 21 percent increase in net annual earnings relative to the comparison group (Bandiera et al. 2017). Access to the program in Bangladesh led to an 8.4 percentage point decrease in households living below the poverty line from 62.4 percent in the comparison group (a 13 percent reduction).

In separate evaluations in Ghana and Uganda, the Graduation approach (or similar bundled programs) were compared against either an asset transfer or a savings component alone. Neither of the pared down versions led to outcomes that were comparable to the full graduation model (Sedlmayr, Shah, and Sulaiman 2018; Banerjee, Karlan, et al. 2018). While understanding the underlying mechanisms behind these bundled components continues to be a research priority, multifaceted models that include even more programmatic components to address key constraints merit further exploration (Banerjee, Karlan, et al. 2018).

Future research

While there is compelling evidence outlining how the number of businesses within a household affects male and female entrepreneurs differently, it will be important to understand if other demographic details (e.g., age, education level, age difference between spouses, or quality of relationship) are similarly indicative of a financial program's effectiveness. Another critical open research question includes better understanding which approaches are most effective in fundamentally changing and improving intrahousehold power dynamics based on gender. For example, some design features that enable women to protect their resources and maintain financial control might rely on hiding information from spouses in order to circumvent power dynamics in marriage (Fiala 2018a; Riley 2018). While temporarily effective in giving women enhanced control over financial resources, we have limited evidence on whether these approaches will fundamentally alter power imbalances within the household.

Better understanding how gender norms affect choices in entrepreneurship is also an area for future research. In particular, what are the drivers of women's self-selection into less profitable industries, and is there scope for change? To what extent do expectations around domestic labor play a role, and will engaging men in domestic work offer women more flexibility in entrepreneurship? Better understanding gendered preferences between formal and self-employment will also be helpful in assessing how employment decisions reflect agency versus constraints (e.g., opting into self-employment due to lack of child care options versus entrepreneurial interest).

Meanwhile, more rigorous research is needed to evaluate the effectiveness of trainings that explicitly address gender dynamics in entrepreneurship and to understand if these approaches more effectively shift individual and collective gender norms. For example, adding gender-specific components to the Graduation approach might enhance the outcomes. Finally, more information on cost-effectiveness,

similar to the trials conducted with the Graduation approach, will be important for assessing whether and how to bundle economic and non-economic programming.

5.3. Community and political domain of agency

Women's ability to have a voice in collective decision-making and to be active members of society remains limited in many contexts around the world. Women are underrepresented as voters and in the political sphere; worldwide, only 24.3 percent of national parliamentarians were women in 2019 (UN Women 2019). Women are often restricted in their ability to engage in more informal decision-making processes at the local level, to be active members of their community, to participate in groups, and, more broadly, to benefit from social ties and community support. There are multiple barriers to women's political and community participation. Restrictive gender norms, prejudice against women as leaders, restrained access to political information, and limited mobility are some important ones.

We consider women's active participation in collective (formal and informal) decision-making, voting behaviors, social ties, and membership in groups to be indirect indicators of agency. Women's low participation in politics or in the community may not necessarily stem from lack of agency but may be the consequence of women's preferences and their active decision not to participate. Conversely, the presence of women in leadership positions may not be equated to women's agency. For example, this could be only a mechanical result of quotas and not necessarily a sign of women's ability to speak up and influence political decisions. Similarly, observing women voting may not necessarily be a reliable indicator of agency if women cannot express their vote independently from the influence or pressure from others. At the same time, however, increases in female participation in these domains may indicate that a woman has gained greater ability to advocate for herself and her interests in the public sphere.

5.3.1. Participation in politics and in community decision-making

Community and political participation refers to women's leadership positions in political bodies and formal decision-making processes at the community level. These concepts are measured through the number of women running for office, the number of women winning elections and occupying leading positions, women's attendance to public meetings, women's propensity to speak up and voice their opinions, or women's participation in community-driven development projects. We reviewed 27 studies that evaluated gender quotas, information sharing interventions, savings groups, SHGs, and multicomponent interventions.

Main takeaways

- In India, mandating leadership opportunities for women through gender quotas increased women's political participation. This effect remained even after the quota was withdrawn. A small number of studies indicate that gender quotas in other countries or in community-driven development projects did not have similar outcomes.
- The evidence on the impact of programs that provided information on women's political participation was mixed. Existing gender norms may have limited the effects of information sharing programs.

- A small number of studies found that that SHGs enhanced women's civic engagement in community decision-making in India, where political participation and representation among women are generally low. However, it is unclear whether similar models can achieve the same impacts in other contexts.
- There is strong evidence that the Graduation approach increased women's participation in politics and community decision-making in several contexts.

In India, mandating leadership opportunities for women through gender quotas increased women's political participation. This effect was more pronounced after multiple election cycles and remained even after the quota was withdrawn. However, a similar political gender quota in Lesotho had opposite effect on women's engagement in politics. In India, reserved seats for women in local village councils led to increases in political participation among women; women in villages with reservations were more likely to attend and participate in village council assemblies. This effect persisted, but was smaller in magnitude, after the reservation was withdrawn (Deininger et al. 2015). In addition, when the quota was in effect, women who attended council meetings were more likely to participate in discussions, compared to women in non-reserved villages.

Two studies suggest that gender quotas in India changed attitudes towards women leaders, which in turn increased women's political representation. One study found that gender quotas increased women's chances of electoral victory and that this effect was more pronounced after two reservation cycles, rather than one (Beaman et al. 2009). Another study of gender quotas in India found that reservations improved women's chances of electoral victory, even after the quotas were withdrawn (Bhavnani 2009). A change in attitudes about the ability of women candidates to win elections may have led to a greater willingness among political parties to grant "tickets" to women, thereby enabling women candidates to stand for elections and increasing women's electoral chances (Bhavnani 2009). Other studies in India also found that women's greater participation in politics led to: increases in public goods responding to women's needs (Chattopadhyay and Duflo 2004), heightened police responsiveness to crimes against women (Iyer et al. 2012), and increased aspirations and educational attainment among girls (Beaman et al. 2012). It is unclear whether these findings about gender quotas generalize to higher political levels. In a study using an RD design in India, a woman's electoral victory in the state legislative assembly led to an increase in the share of female candidates in the next election (Bhalotra, Clots-Figueras, and Iyer 2018). However, this increase was driven by greater willingness of incumbent women to run for re-election, instead of the entry of new female candidates (Bhalotra, Clots-Figueras, and Iyer 2018).

However, the positive effects of gender quotas on women's political participation are not universal. In Lesotho, a randomized policy experiment showed that women living in districts that reserved councilor seats for female candidates were less engaged with councilors and expressed lower interest in politics. Researchers explained that this is was due to the negative perception of the mandatory quota in this specific context, as the policy did not originate from grassroot efforts within the country and was considered unfair to male candidates (Clayton 2015).

A small number of studies found that gender quotas for participation in community-driven development projects did not consistently lead to increases in women's political participation. In Afghanistan, a community-driven development intervention that mandated women's participation through quotas led to more gender-equal attitudes towards women participating in village governance and

increased women's participation in social, economic, and political activities, but the intervention did not change entrenched attitudes about women's role in society (Beath, Christia, and Enikolopov 2013). However, comparable changes did not occur in two other contexts. In Sierra Leone, quotas for women and young adults in a community-driven development program did not lead to a persistent effect on their participation in local decision-making (Casey, Glennerster, and Miguel 2012). Researchers argued that mandating participation in community-driven development may be less effective in challenging existing elites than quotas imposed in a formal state body, and this might explain the difference with the Indian cases. In the Democratic Republic of Congo, gender quotas in community management committees had no effect on women's position in the community or attitudes towards women's role in the community (van der Windt, Humphreys, and Sanchez de la Sierra 2018). Taken together, this evidence highlights the need to better understand how to create leadership opportunities for women in these contexts and decision-making bodies.

The evidence on the impact of programs that provide access to information on women's political participation is mixed. Existing gender norms may have limited the impacts of information sharing programs. In India, a voter information campaign that increased citizen awareness about the responsibilities of local leaders increased women's political participation (Banerjee, Duflo, et al. 2018). The program doubled the proportion of female candidates and this effect was sustained in the next election, five years later; however, it did not increase the probability of electing a female candidate. At the community decision-making level, one study using a DID design from Kenya found that an information sharing and training program targeted towards women increased their political awareness and physical participation in formal community decision-making processes. The intervention increased the number of women who attended community decision-making meetings but did not affect the probability of women speaking up at those meetings. Researchers conjecture that these results could be attributed to men being less willing to accept women's input in the public sphere (Grillos 2018). Similarly, in Uganda, participation in a community-driven development program was not affected by an information sharing intervention that informed residents about their rights and opportunities to participate in local decisionmaking (Buntaine, Daniels, and Devlin 2018). Instead, there were indications of adverse effects, as women exposed to the information sharing intervention perceived fewer opportunities to participate in community planning and decision-making. Researchers suggest that the information intervention might have made existing gender norms that excluded women more salient (Buntaine, Daniels, and Devlin 2018).

A small number of studies found that SHGs enhanced women's civic engagement in community decision-making in India, where women's political participation and representation are generally low. However, it is unclear whether similar models can achieve the same impacts in other contexts. A study evaluating SHGs in India through an RD design found that women's political participation at the local level increased as a result of women's networks formed within groups. Members of SHGs were twice as likely to attend local public meetings or make a claim to the local leader (Prillaman 2017). Another evaluation on SHGs in India found that women in villages with SHGs had higher levels of civic engagement, measured through knowledge on where to report grievances about drinking water and actual reporting behaviors, in addition to increased engagement with local village councils, the *Gram Sabha* and *Gram Panchayat* (R. M. Desai and Joshi 2013). A third study using an RD design in India found that

SHGs increased women's willingness to act on and pursue institutional responses to public problems but did not affect civic action (Joshi, Palaniswamy, and Rao 2015).

Similar interventions in other contexts did not lead to comparable effects. A VSLA intervention in Ghana, Malawi, and Uganda did not affect a women's community participation index, which captured self-reported involvement in community affairs (Karlan et al. 2017). However, when researchers evaluated the components of the index, they found that there was a small effect on participation in community meetings (Karlan et al. 2017). In Mali, the Savings for Change program, a group-based savings program, did not increase the community action index, which captured the extent to which women spoke with different village leaders, participated in village meetings and activities, and voted in the last election (Beaman, Karlan, and Thuysbaert 2014).

Two studies evaluated the impact of group-based interventions bundled with training on women's political participation. The IMAGE program in South Africa, which combined group-based microfinance with HIV and gender equity trainings, led to greater involvement of women in collective action (Pronyk et al. 2008). However, this effect was not statistically significant after including controls in the analysis. In India, a program combining SHGs with PLA on health, nutrition, water, sanitation, and hygiene increased women's contact with government officials, although it did not increase women's attendance to public meetings (Subramanyam et al. 2017). A qualitative analysis of mechanisms revealed that SHG meetings might have allowed women to get in touch with local government officials, who occasionally attended meetings together with health workers.

The findings of a study conducted in Benin suggest that, for group-based interventions, the gender composition of groups might be an important aspect to consider. Women who had access to a health education program integrated with microfinance in mixed gender groups scored worse on a social capital index compared to women who had access to the program in women-only groups (Karlan, Thuysbaert, and Gray 2017). Researchers found that adding health education to microfinance services led to a marginally significant increase of 0.21 standard deviations in the social capital index, which measured women's participation, engagement, and influence in the community.

There is strong evidence that the Graduation approach increased women's participation in politics and community decision-making in several contexts. Multicomponent programs that target low-income people may reduce the extent to which they are marginalized in their community, therefore stimulating community engagement and political participation. The Graduation program implemented in six countries (Ethiopia, Ghana, Honduras, India, Pakistan, and Peru) increased an index capturing participation in political activity and village-level actions both immediately and one year after the conclusion of the program in the pooled analysis (Banerjee, Duflo, Goldberg, et al. 2015). Women who received a similar intervention in Afghanistan experienced a 0.33 standard deviations increase in an index capturing social capital and political participation (Bedoya et al. 2019). Finally, a similar intervention in Bangladesh targeted towards women increased the score on an index indicating political activity and awareness of politicians at different levels of government (Bandiera et al. 2017).

Future research

More research is needed to understand how gender biases and norms about women's political participation and leadership exclude women from the political process and how to most effectively counter them. Further, there is a need to study if and how prevalent gender norms lead to backlash against women leaders. Additionally, the effectiveness of interventions that train or fund women to run for political office should be evaluated. Once more women are in decision-making bodies, how does their behavior and decision-making differ from men, if at all? What role do women's movements play in advocating for gender-equitable policies?

While a significant amount of research exists about the effectiveness of gender quotas mandated by the state in India, there is a need to understand how to make quotas effective in other contexts. Further, more research is needed to understand the role of mandating leadership opportunities for women on attitudes towards women leaders and norms surrounding women in leadership positions outside of India.

Most of the studies in this section focus on electoral representation or formalized community decision-making systems, which are only one part of women's broader political participation. To encourage women to play an active role as citizens, more research is needed to gain a systematic understanding of when women actively engage in politics, how they engage, and what are the broader implications of women's political participation.

5.3.2. Voting behaviors

Women's participation in voting is an important prerequisite for their interests to be appropriately represented in the political arena and for their needs to be considered in the process of policymaking. This indicator captures women's propensity to vote, alongside their ability to vote independently of others' influence. Ten studies examined program's impacts on women's voting behaviors and included evaluations of information sharing interventions, economic interventions (microcredit, savings groups and SHGs), and multicomponent interventions like the Graduation approach.

Main takeaways

- There is suggestive evidence that gender norms might have interfered with the effectiveness of information sharing programs aimed to encourage voting among women.
- Interventions to increase women's economic empowerment, including group-based programs and the Graduation approach, did not have consistent impacts on women's voting behaviors.

There is suggestive evidence that gender norms might have interfered with the effectiveness of information sharing programs aimed to encourage voting among women in some settings. In Pakistan, an information campaign that emphasized the importance of voting and the secrecy of balloting was effective in increasing the likelihood of voting by 11 percentage points among both treated women and untreated close neighbors, indicating large geographical spillovers (Giné and Mansuri 2018) Also in Pakistan, voter turnout among women in areas with mixed gender polling stations (i.e., with relaxed gender segregation norms) responded strongly to an information campaign about public service delivery performance, but voter turnout among women in areas with gendered stations (i.e. with strict gender

segregation norms) did not (Chaudhry, Hussain, and Khan 2019). In China, sharing information with women about voting rights increased their knowledge about voting, but the impacts on voting behavior varied by province (Pang, Zeng, and Rozelle 2013, 2014). For example, voting behavior was unaffected among women in the Ningxia province, where women face heightened social restrictions. Qualitative evidence suggests that women faced many barriers, including social norms and poverty, that prevented them from acting on this gained knowledge (Pang, Zeng, and Rozelle 2014).

Interventions to increase women's economic empowerment, including group-based programs and the Graduation approach, did not have consistent impacts on women's voting behaviors. In India, combining SHGs with PLA had a positive effect on the probability of women voting in national elections (Subramanyam et al. 2017). However, other evaluations of women's SHGs in India or savings groups in Mali did not have impacts on women's community engagement, as measured by indexes that included voting (Joshi, Palaniswamy, and Rao 2015; Beaman, Karlan, and Thuysbaert 2014). In addition, the Graduation approach, implemented in six countries, did not find any effect on voting, although there was an increase in a general index capturing political participation (Banerjee, Duflo, Goldberg, et al. 2015).

Future Research

Since there is little rigorous research on the topic, more research is needed to understand how to increase voting among women. Do certain topics consistently motivate female voters across contexts? Furthermore, research is needed on how gender norms mediate the effects of interventions designed to increase women's voter turnout, and how these norms can be overcome or subverted to effectively deliver these interventions.

5.3.3. Participation in groups and ties in the community

This indicator includes women's access to networks, social support, and membership in groups. It captures the extent to which women are connected in their community, the strength of these social ties, and women's ability to count on social support. This indicator also includes women's membership in community groups that are not strictly involved in political action and that do not necessarily entail formal decision-making processes. We review 26 studies that evaluated interventions including conditional transfers, microcredit, savings groups, information sharing interventions, multicomponent interventions, and programs for adolescent girls.

Main Takeaways

- Several studies suggest that, in South Asia, women's groups either increased or strengthened women's ties in the community and participation in other groups.
- There is suggestive evidence that safe spaces and trainings for adolescent girls strengthened social ties. However, it is unclear to what extent these findings hold in conflict-affected areas or areas experiencing an external shock.

Several studies suggest that, in South Asia, women's groups either increased or strengthened women's ties in the community and participation in other groups. Four studies in South Asia found

that group-based approaches improved or strengthened social ties, and one found that increasing the group meeting frequency impacted members' social interactions (Prillaman 2017; R. M. Desai and Joshi 2013; Feigenberg, Field, and Pande 2013; Gram, Morrison, et al. 2018; Jejeebhoy et al. 2017). In sub-Saharan Africa, however, the evidence on strengthening ties in the community is more limited.

SHGs in India appear to be a promising tool to increase women's social ties and community engagement. One study using an RD design showed that SHGs strengthened women's social ties, which in turn increased women's political participation (Prillaman 2017). Similarly, another study found that SHGs in India led to a large, positive increase in women's participation in group programs and civic engagement (R. M. Desai and Joshi 2013). In Nepal, a health group incorporating PLA increased women's overall participation in groups unrelated to the intervention by 0.31 standard deviations. The impact on group participation was even higher when the program also offered cash or food transfers (Gram, Morrison, et al. 2018). However, another study of a similar intervention in Nepal did not find similar effects in the long-run (Gram, Skordis-Worrall, et al. 2018). Additionally, access to a gender training program for SHG members in India increased women's access to social support relative to a comparison group, where women had access to SHGs and did not receive the trainings (Jejeebhoy et al. 2017).

Furthermore, in India, increasing the frequency of group meetings from once a month to once a week strengthened women's social interactions in the short and longer term (Feigenberg et al. 2014; Feigenberg, Field, and Pande 2013). More than a year after the end of the intervention, women who had weekly meetings scored higher in a social contact index, which captured their interactions with other group members outside of group meetings (Feigenberg et al. 2014).

In sub-Saharan Africa, studies of group-based interventions for women did not consistently find similar positive effects. A VSLA intervention in Ghana, Malawi, and Uganda had a small impact on the likelihood of women taking part in community meetings, but it did not significantly change group membership or most measures of community participation (Karlan et al. 2017). Women accessing savings groups in Mali through the Savings for Change program did not experience an increase in social ties, measured via a social integration index that captured whether women would ask for or give money to other members of the group or whether they would go to the market with other group members (Baro et al. 2013; Beaman, Karlan, and Thuysbaert 2014).

In the Democratic Republic of Congo, a VSLA program for sexual violence survivors did not increase women's social ties or women's participation in groups (Bass et al. 2016). Similarly, a group-based microfinance program in South Africa, when not combined with a gender training, did not increase women's ties in the community, measured through their social networks, their sense of community support, and their perception of solidarity during a crisis (Kim et al. 2009). These two studies that did not find impacts, however, identified qualitative evidence that social networks were strengthened in ways that were not measured or substantiated quantitatively (Bass et al. 2016; Kim et al. 2009).

In Benin, the gender composition of microfinance groups mattered for increasing women's social ties (Karlan, Thuysbaert, and Gray 2017). Overall, women who received the program in mixed gender groups scored worse on social capital measures, which included group membership, support networks, and participation in village meetings. This provides some support to the claim that encouraging women to

convene and interact improves social capital. However, the group's gender composition did not influence a social network index that measured the strength of women's social networks.

Interestingly, one study using an RD design in Nigeria found that a microcredit program without a group component had an impact on an index that included an indicator of women's connectedness in the community. The program also increased a measure of women's networking, community activities, and self-confidence (Ikenwilo et al. 2016).

There is suggestive evidence that safe spaces and trainings for adolescent girls strengthened social ties. However, it is unclear to what extent these findings hold in conflict-affected areas or areas **experiencing an external shock.** Three out of five studies that evaluated safe space programs identified positive impacts on girls' social ties. In Ethiopia, South Sudanese adolescent girls in refugee camps receiving a safe space and life skills training program had 1.71 greater odds of reporting having friends than girls in a comparison arm and two times greater odds of having a non-family female adult they could trust (Stark, Asghar, et al. 2018). In South Sudan, girls in communities with low exposure to conflict that received the ELA program were 12.4 percentage points (a 30 percent increase) more likely than girls in the comparison group to have a place, other than home or school, where they could meet other girls, more than a year after the program ended. However, these same effects were not in place for girls in communities severely affected by conflict (Buehren, Chakravarty, et al. 2017). The same program, implemented during the Ebola outbreak in Sierra Leone, helped protect girls' social ties for younger girls aged 12-17 and older girls aged 18-25 (Bandiera et al. 2018). Conversely, in Tanzania, the ELA program did not enhance girls' interactions, as it did not change the extent to which girls talked to their friends about social issues or business (Buehren, Goldstein, et al. 2017). However, adding a microfinance component to the safe space program brought about a significant increase in the likelihood of girls talking to their friends about business. In Liberia, a safe space and life skills training program in a post-Ebola and post-conflict setting did not increase girls' social capital, measured as an index that included questions on friendship and social resources (Özler et al. 2020).

Two studies evaluating adolescent girls programs in Bangladesh and Haiti did not find program impacts on adolescent girls' participation in other groups or associations. In Bangladesh, the BALIKA program, which provided education tutoring, livelihoods skills trainings, or gender and life skills trainings in safe spaces, increased girls' membership in adolescent clubs but did not increase girls' participation in other social or cultural clubs and associations (Amin et al. 2016). The effect on participation in adolescent clubs may be in large part attributable to girls taking up the program. Similarly, in Haiti, the Adolescent Girls Initiative did not impact the likelihood of participating in associations or groups (Rodella, Cuevas, and Atuesta 2015).

Future Research

The linkages between social relationships and ties to the community and other aspects of women's agency remain an open question that merits further research. For example, are social relationships a critical aspect of enhancing skills through group-based trainings? In addition, how can social connections be developed for the most vulnerable and marginalized social groups? Other important areas for research include

collective action and local movement building, and to what extent social relationships play a role in generating social change led by women.

6. Additional Notes on Women's Agency

Two additional topics emerged as common themes as we reviewed the literature across indicators of women's agency: engaging men and measuring women's agency. Although a literature review on either topic is beyond the scope of this review, we discuss them briefly and refer to other resources for a more thorough understanding of these two important topics.

6.1. Engaging men

Analyzing the literature on all the interventions that target men is beyond the scope of this review. However, given the important role men play in women's family, economic, and social life, and given that they often play a role in restricting women's agency, we discuss several studies that offer insights on the potential and limitations of male engagement programs aimed to improve women's agency, especially in household decision-making and freedom from violence.

Interventions aimed to change men's knowledge, attitudes, or behaviors can be an effective approach to eliciting men's support for women's empowerment and reducing violence against women. However, male engagement strategies need to pay attention to how men's participation affects women in mixed-gender programming. Assessing the incremental effects of male engagement remains a challenge due to the low take-up among men. Programs that engaged men and aimed to change men's knowledge or behaviors in specific domains, such as household finance (Seshan and Yang 2014) and maternal and child health (Doyle et al. 2018), were effective in encouraging joint household decision-making. Similarly, anti-violence programs designed to target couples or families were successful in reducing violence against women (Doyle et al. 2018; Gupta et al. 2013; Ismayilova et al. 2018).

However, inviting men to join training programs with women might have negative impacts on women's attitudes about gender norms or their participation in the community. Inviting men to participate in a business training program in Uganda did not strengthen women's autonomy or improve their attitudes about gender norms compared to the women-only training (E. P. Green et al. 2015). Moreover, health education delivered to mixed-gender microcredit lending groups, as compared to women-only groups, decreased women's social capital in Benin (Karlan, Thuysbaert, and Gray 2017). Thus, male engagement strategies need to pay attention to how men's participation affects women in mixed-gender programming.

Some studies identified a lack of incremental effects of engaging men and found this might partially be attributed to men's low participation in the interventions being evaluated. Many training programs that tried to engage men, such as life skills training, entrepreneurship training, and gender transformative men's groups, suffered from low attendance or program take-up among men and had no incremental impact on attitudes towards gender norms, business outcomes, or violence against women compared to delivering the interventions to women alone (Jejeebhoy et al. 2017; Holden et al. 2016; Bulte and Lensink

2019; E. P. Green et al. 2015). Nonetheless, an anti-IPV community mobilization program in urban Bangladesh only reduced physical IPV against adolescent girls when men's groups took place in addition to women's groups (Naved et al. 2018). How to motivate men to participate in interventions that aim to improve women's and girls' agency remains an important topic for future research.

6.2. Measuring women's agency

The challenges in measuring women's empowerment and agency have been documented in several methodology papers (Donald et al. 2017; Kabeer 1999; Diaz-Martin, Glennerster, and Walsh 2018; Martinez-Restrepo and Ramos-Jaimes 2017). In addition, several initiatives are underway to compile existing measures of women's empowerment or validate aggregate measures of specific agency domains (University of California San Diego 2019; MEASURE Evaluation 2019; OECD Development Centre 2019; The World Bank 2019; Alkire et al. 2013).12 While this review is not about measurement per se, measurement issues presented a challenge in our interpretation of the evidence. We outline some of the top issues we faced in this section.

There is a lack of consensus around the best way to measure decision-making and a great need for more validation and measurement research to identify the approaches that are most useful in different cases. The studies included in this review used varied decision-making questions or approaches to measure decision-making power in the household. Many used survey questions to measure to what extent women, versus men or other household members, have a say in decisions about household spending, consumption, children's schooling and health care, and women's mobility, usually assessed individually or as an index. In addition to being subject to reporting bias, these questions might also not be meaningful or relevant without formative research to tailor them to the local context. Researchers have also used non-survey instruments to capture difficult-to-measure outcomes related to women's empowerment, relying on revealed instead of stated preferences. In particular, studies increasingly used lab-in-the-field experiments to measure women's relative status in the household, relying on observed behaviors instead of proxy measures based on socioeconomic status or self-reported outcomes using decision-making questions (Fiala 2018a; Schaner 2017; Bulte, Lensink, and Vu 2016; Almås et al. 2018).

Measuring violence against women and girls poses additional methodological difficulties due to challenges women face in reporting this information safely. Worldwide, less than 40 percent of women experiencing violence seek help of any sort and, among those, only ten percent report violence to the police (United Nations Statistical Division 2015). Researchers have thus relied on survey instruments instead of police or hospital reports to collect data on women's exposure to physical, sexual, or emotional violence, sometimes using technologies such as audio computer-assisted self-interview software or interactive voice response applications to reduce reporting bias. To overcome potential biases from self-reported measures of sensitive topics, some researchers used list experiments to measure prevalence of violence against women and girls (Bulte and Lensink 2019). By design, this technique does not allow for the collection of information on violence at the individual level but only at the sub-group level chosen by the researcher (i.e., within the intervention and comparison group, within the sub-group of educated women, employed women, and so on).

A few studies that used both survey questions and lab-in-the-field experiments showed different effects on indicators of women's agency, highlighting the need to undertake more systematic research and validation exercises on agency metrics. An evaluation of a CCT program in Macedonia used a willingness-to-pay experiment to identify the values that made the women indifferent between the recipient of the transfers being herself or her husband, providing information about the trade-off the women make between having more overall household income versus being the direct recipients of the money. The results from the lab-in-the field experiment showed that women who were offered CCTs revealed a lower willingness to pay to gain control over income, suggesting their higher bargaining power in the household. However, the effects of the cash transfer were not significant using different measures of empowerment (i.e., household decision-making index or domestic violence index) (Almås et al. 2018).

Similarly, in Vietnam, an entrepreneurship and gender training program did not affect women's decision-making measured by an index of whether women make most decisions in seven different categories of household expenditures (Bulte and Lensink 2019). However, using a lab-in-the-field experiment, where spouses were asked to allocate a set budget first separately and then jointly as a couple, the same training program increased women's influence in household decisions because the joint decisions in the experiment were more closely aligned to women's preference after the training (Bulte, Lensink, and Vu 2016). While this could point to differences in revealed versus stated preferences, a common measurement challenge in self-reported data, it also signals the fact that some of the most widely used metrics for capturing decision-making sometimes fail to pick up meaningful information.

The prevalence of violence tended to be lower when elicited through traditional survey questions than when reported indirectly through list experiments (Bulte and Lensink 2019; Holden et al. 2016; Kotsadam and Villanger 2019), although in one case, researchers reported that the difference was not statistically significant (Kotsadam and Villanger 2019). In one study, findings from the list experiment led to opposite assessment of intervention effects on IPV compared to survey questions (Bulte and Lensink 2019). Despite the limitations of both data collection methods, future evaluations should consider using list experiments alongside traditional survey tools.

When it comes to reporting violence, the direction of the reporting bias associated with exposure to treatment, when it occurs, is ex-ante unclear. For example, an empowerment program may raise women's awareness of gender norms and their knowledge on what constitutes violence, making women more willing to openly report it even though the actual prevalence of violence remained unchanged. This would make researchers erroneously infer that the empowerment program had adverse effects. Conversely, if more empowered women refrain from reporting being victims of abuse because they are less willing to identify as a victim, this would lead to erroneous conclusions that the empowerment program decreased violence.

Individual indicators without context, including the outcomes in our conceptual framework, tell us little about women's role as agents. To determine whether changes in women's well-being are indeed the result of increased agency, we need information about women's goals and interests, how the decisions were made that led to these outcomes, and how women perceive these changes (i.e., the process of empowerment and decision-making). Yet, researchers often lack this information. For example, an

empowerment program that led to women's greater participation in income-generating activities might not necessarily reflect an increase in economic agency if women were forced to work out of severe economic necessity or had limited autonomy in their labor market choices (Field, Glennerster, and Nazneen 2018). Extensive formative research to deeply understand the context and pathways for the results can help substantiate quantitative findings.

Some commonly used indicators, such as investments in children, might not be valid metrics for women's agency in certain contexts. Many evaluations associate women's empowerment with improvements in children's health and education, assuming that greater household investment in children's health care, nutrition, and schooling represents women's preferences (van den Bold, Quisumbing, and Gillespie 2013; Cunningham et al. 2015; Pratley 2016; Thorpe et al. 2016). Since women are usually the primary caregivers for children, more resources channeled to children are often considered a result of women's greater power in the household (Richards et al. 2013; Gitter and Barham 2008).

Although targeting transfers to women can improve children's well-being (Yoong, Rabinovich, and Diepeveen 2012), two recent studies found that children's education and health outcomes did not differ according to whether the recipient of transfers was the father or the mother. In the conditional cash transfer program in Burkina Faso mentioned above, giving the transfers to fathers did not affect the program's impact on children's school enrollment or number of health check-ups compared to when the transfer was offered to mothers (Akresh, de Walque, and Kazianga 2016). Similarly, offering cash to fathers instead of mothers in an education-focused cash transfer program in Morocco made no difference in children's school participation (Benhassine et al. 2015). These findings demonstrate that providing financial resources to fathers or mothers in transfer programs led to similar outcomes related to children's well-being, which questions the use of investment in children as a default proxy measure of women's agency.

7. Conclusion

Overall, the evidence has crystallized around the idea that policymakers, practitioners, and researchers should be more intentional when it comes to addressing power imbalances and social inequalities based on gender by designing programs that directly address attitudes about gender. Regardless of whether or not gender dynamics were considered in the program or research design, they may end up playing a meaningful role in moderating or even blocking the intended impacts. For this reason, access to resources alone, without addressing gender-specific constraints, is often not an effective mechanism for enhancing women's agency. While interventions that address multiple constraints that women face through bundled programs appear effective in improving multiple indicators of women's agency, more research is needed to understand which mechanisms generate positive outcomes and whether the full package of services is required. Opportunities to enhance women's agency will also change over a woman's life cycle. The timing of marriage and childbearing for young women offers key margins for improvements, while it appears more challenging to alter household decision-making dynamics within a marriage. A better understanding of other dimensions of heterogeneity by ethnicity, religion, class, etc. will additionally improve our understanding of how to enhance women's agency.

Attempting to understand what works for an outcome as multidimensional as women's agency implies connecting the dots between a range of possibilities, decision points, preferences, and domains. Based on our review of the evidence, some interventions that were effective in enhancing multiple indicators of women's agency included: adolescent girls' programs, laws that mandate equality, cash and in-kind transfers, and the Graduation approach. We also identified a range of takeaways specific to each direct and indirect indicator of agency that we reviewed.

We found that programs that offer resources might be more successful in improving women's agency if they employ design features (e.g., digital accounts and privacy features) with mechanisms that give women more control over those resources. Nonetheless, design features that enable women to hide decisions from their spouses likely do not offer long-term solutions to the very power imbalances that require women to shield their possessions or conceal their choices. Evaluating interventions with the people that consciously or unconsciously constrain and restrict women's agency (e.g., partners, parents, etc.) should be prioritized. Continuing to research and understand approaches that are designed to shift, rather than accommodate, individual and collective gender norms that perpetuate inequality, then, is a continued priority for the development community

Bibliography

- Abel, Martin, Rulof Burger, and Patrizio Piraino. 2018. "The Value of Reference Letters: Experimental Evidence from South Africa." Working Paper.
- Abramsky, Tanya, Karen Devries, Ligia Kiss, Janet Nakuti, Nambusi Kyegombe, Elizabeth Starmann, Bonnie Cundill, et al. 2014. "Findings from the SASA! Study: A Cluster Randomized Controlled Trial to Assess the Impact of a Community Mobilization Intervention to Prevent Violence against Women and Reduce HIV Risk in Kampala, Uganda." *BMC Medicine* 12 (1): 122. https://doi.org/10.1186/s12916-014-0122-5.
- Acevedo, Paloma, Guillermo Cruces, Paul Gertler, and Sebastian Martinez. 2017. "Living up to Expectations: How Job Training Made Women Better off and Men Worse Off." Cambridge, MA: National Bureau of Economic Research. https://doi.org/10.3386/w23264.
- Adoho, Franck, Shubha Chakravarty, Dala T. Korkoyah, Mattias Lundberg, and Afia Tasneem. 2014. *The Impact of an Adolescent Girls Employment Program: The EPAG Project in Liberia*. Policy Research Working Papers. The World Bank. https://doi.org/10.1596/1813-9450-6832.
- Aker, Jenny C., Rachid Boumnijel, Amanda McClelland, and Niall Tierney. 2016. "Payment Mechanisms and Antipoverty Programs: Evidence from a Mobile Money Cash Transfer Experiment in Niger." *Economic Development and Cultural Change* 65 (1): 1–37. https://doi.org/10.1086/687578.
- Akresh, Richard, Damien de Walque, and Harounan Kazianga. 2016. Evidence from a Randomized Evaluation of the Household Welfare Impacts of Conditional and Unconditional Cash Transfers Given to Mothers or Fathers. Policy Research Working Papers. The World Bank. https://doi.org/10.1596/1813-9450-7730.
- Alam, Andaleeb, Javier E Baez, and Ximena V Del Carpio. 2011. "Does Cash for School Influence Young Women's Behavior in the Longer Term? Evidence from Pakistan." Policy Research Working Paper 5669. The World Bank.
- Alibhai, Salman, Niklas Buehren, Michael Frese, Markus Goldstein, Sreelakshmi Papineni, and Kathrin Wolf. 2019. "Full Esteem Ahead? Mindset-Oriented Business Trainings in Ethiopia." Working Paper.
- Ali, Daniel Ayalew, Matthew Collin, Klaus Deininger, Stefan Dercon, Justin Sandefur, and Andrew Zeitlin. 2014. "The Price of Empowerment: Experimental Evidence on Land Titling in Tanzania." *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2458152.
- Ali, Daniel Ayalew, Klaus Deininger, and Markus Goldstein. 2014. "Environmental and Gender Impacts of Land Tenure Regularization in Africa: Pilot Evidence from Rwanda." *Journal of Development Economics* 110 (September): 262–75. https://doi.org/10.1016/j.jdeveco.2013.12.009.
- Alkire, Sabina. 2008. "Concepts and Measures of Agency." OPHI Working Paper 9. Oxford Poverty & Human Development Initiative.
- Alkire, Sabina, Ruth Meinzen-Dick, Amber Peterman, Agnes Quisumbing, Greg Seymour, and Ana Vaz. 2013. "The Women's Empowerment in Agriculture Index." *World Development* 52 (December): 71–91. https://doi.org/10.1016/j.worlddev.2013.06.007.
- Almås, Ingvild, Alex Armand, Orazio Attanasio, and Pedro Carneiro. 2018. "Measuring and Changing Control: Women's Empowerment and Targeted Transfers." *The Economic Journal* 128 (612): F609–39. https://doi.org/10.1111/ecoj.12517.
- Amaral, Sofia, Sonia Bhalotra, and Nishith Prakash. 2018. "Gender, Crime and Punishment: Evidence from Women Police Stations in India." Working Paper.

- Amin, Sajeda, Johana Ahmed, Jyotirmoy Saha, Irfan Hossain, and Hossain Eashita. 2016. "Delaying Child Marriage through Community-Based Skills-Development Programs for Girls: Results from a Randomized Controlled Study in Rural Bangladesh." Population Council.
- Anderson, Siwan, and Garance Genicot. "Suicide and property rights in India." *Journal of Development Economics* 114 (2015): 64-78.
- Angelucci, Manuela, Dean Karlan, and Jonathan Zinman. 2015. "Microcredit Impacts: Evidence from a Randomized Microcredit Program Placement Experiment by Compartamos Banco." *American Economic Journal: Applied Economics* 7 (1): 151–82.
- Annan, Jeannie, Tom Bundervoet, Juliette Seban, and Jaime Costigan. 2013. "A Randomized Impact Evaluation of Village Savings and Loans Associations and Family-Based Interventions in Burundi." New York: International Rescue Committee.
- Ashraf, Nava, Natalie Bau, Corinne Low, and Kathleen McGinn. "Negotiating a Better Future: How Interpersonal Skills Facilitate Intergenerational Investment." *The Quarterly Journal of Economics* 135, no. 2 (2020): 1095-1151.
- Ashraf, Nava, Erica Field, and Jean Lee. 2014. "Household Bargaining and Excess Fertility: An Experimental Study in Zambia." *American Economic Review* 104 (7): 2210–37. https://doi.org/10.1257/aer.104.7.2210.
- Ashraf, Nava, Dean Karlan, and Wesley Yin. 2010. "Female Empowerment: Impact of a Commitment Savings Product in the Philippines." *World Development* 38 (3): 333–44. https://doi.org/10.1016/j.worlddev.2009.05.010.
- Attanasio, Orazio, Britta Augsburg, Ralph De Haas, Emla Fitzsimons, and Heike Harmgart. 2015. "The Impacts of Microfinance: Evidence from Joint-Liability Lending in Mongolia." *American Economic Journal: Applied Economics* 7 (1): 90–122.
- Attanasio, Orazio, Adriana Kugler, and Costas Meghir. 2011. "Subsidizing Vocational Training for Disadvantaged Youth in Colombia: Evidence from a Randomized Trial." *American Economic Journal: Applied Economics* 3 (3): 188–220. https://doi.org/10.1257/app.3.3.188.
- Azevedo, Thomas Alvares de, Jeff Davis, and Munene Charles. 2013. "Testing What Works in Youth Employment: Evaluating Kenya's Ninaweza Program." Baltimore, Maryland: International Youth Foundation.
- Baiocchi, Michael, Benjamin Omondi, Nickson Langat, Derek B Boothroyd, Jake Sinclair, Lee Pavia, Munyae Mulinge, Oscar Githua, Neville H Golden, and Clea Sarnquist. 2017. "A Behavior-Based Intervention That Prevents Sexual Assault: The Results of a Matched-Pairs, Cluster-Randomized Study in Nairobi, Kenya." *Prevention Science* 18 (7): 818–27. https://doi.org/10.1007/s11121-016-0701-0.
- Baird, Sarah, Ephraim Chirwa, Jacobus de Hoop, and Berk Ozler. 2013. "Girl Power: Cash Transfers and Adolescent Welfare. Evidence from a Cluster-Randomized Experiment in Malawi." NBER Working Paper 19479. National Bureau of Economic Research.
- Baird, Sarah, Ephraim Chirwa, Craig McIntosh, and Berk Ozler. 2010. "The Short-Term Impacts of a Schooling Conditional Cash Transfer Program on the Sexual Behavior of Young Women." *Health Economics* 19 Suppl (September): 55–68. https://doi.org/10.1002/hec.1569.
- Baird, Sarah, Ephraim Chirwa, Craig Mcintosh, and Berk Ozler. 2015. "What Happens Once the Intervention Ends? The Medium-Term Impacts of a Cash Transfer Programme in Malawi." 3ie Impact Evaluation Report 27. New Delhi: International Initiative for Impact Evaluation (3ie).
- Balmori de la Miyar, Jose Roberto. 2018. "The Effect of Conditional Cash Transfers on Reporting

- Violence against Women to the Police in Mexico." *International Review of Law and Economics* 56 (December): 73–91. https://doi.org/10.1016/j.irle.2018.08.002.
- Bandiera, Oriana, Niklas Buehren, Robin Burgess, Markus Goldstein, Selim Gulesci, Imran Rasul, and Munshi Sulaiman. 2020. "Women's Empowerment in Action: Evidence from a Randomized Control Trial in Africa." *American Economic Journal: Applied Economics* 12 (1): 210–59. https://doi.org/10.1257/app.20170416.
- Bandiera, Oriana, Niklas Buehren, Markus Goldstein, Imran Rasul, and Andrea Smurra. 2018. "The Economic Lives of Young Women in the Time of Ebola: Lessons from an Empowerment Program." Working Paper.
- Bandiera, Oriana, Robin Burgess, Narayan Das, Selim Gulesci, Imran Rasul, and Munshi Sulaiman. 2017. "Labor Markets and Poverty in Village Economies." *The Quarterly Journal of Economics*, 811–70.
- Banerjee, Abhijit, Esther Duflo, Rachel Glennerster, and Cynthia Kinnan. 2015. "The Miracle of Microfinance? Evidence from a Randomized Evaluation." *American Economic Journal: Applied Economics* 7 (1): 22–53.
- Banerjee, Abhijit, Esther Duflo, Nathanael Goldberg, Dean Karlan, Robert Osei, William Parienté, Jeremy Shapiro, Bram Thuysbaert, and Christopher Udry. 2015. "A Multifaceted Program Causes Lasting Progress for the Very Poor: Evidence from Six Countries." *Science* 348 (6236): 1260799. https://doi.org/10.1126/science.1260799.
- Banerjee, Abhijit, Esther Duflo, Clement Imbert, and Rohini Pande. 2018. "Entry, Exit and Candidate Selection: Evidence from India." Working Paper.
- Banerjee, Abhijit, Rema Hanna, Gabriel E. Kreindler, and Benjamin A. Olken. 2017. "Debunking the Stereotype of the Lazy Welfare Recipient: Evidence from Cash Transfer Programs." *The World Bank Research Observer* 32 (2): 155–84. https://doi.org/10.1093/wbro/lkx002.
- Banerjee, Abhijit, Dean Karlan, Robert Darko Osei, Hannah Trachtman, and Christopher Udry. 2018. "Unpacking a Multi-Faceted Program to Build Sustainable Income for the Very Poor." *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3127053.
- Banerjee, Abhijit, Eliana La Ferrara, and Victor Orozco. 2019. "Entertainment, Education and Attitudes Towards Domestic Violence." *AEA Papers and Proceedings* 109 (May): 133–37.
- Baro, Mamadou, Lori Beaman, J Greenberg, and D Karlan. 2013. "Final Impact Evaluation of the Saving for Change Program in Mali, 2009-2012." Bureau of Applied Research in Anthropology, University of Arizona.
- Barros, Ricardo Paes de, Pedro Olinto, Trine Lunde, and Mirela Caralho. 2011. "The Impact of Access to Free Childcare on Women's Labor Market Outcomes: Evidence from a Randomized Trial in Low-Income Neighborhoods of Rio de Janeiro." Working Paper.
- Bass, J, S Murray, G Cole, P Bolton, C Poulton, K Robinette, J Seban, K Falb, and J Annan. 2016. "Economic, Social and Mental Health Impacts of an Economic Intervention for Female Sexual Violence Survivors in Eastern Democratic Republic of Congo." *Global Mental Health (Cambridge, England)* 3 (June): e19. https://doi.org/10.1017/gmh.2016.13.
- Bastagli, Francesca, Jessica Hagen-Zanker, Luke Harman, Valentina Barca, Georgina Sturge, and Tanja Schmidt. 2019. "The Impact of Cash Transfers: A Review of the Evidence from Low- and Middle-Income Countries." *Journal of Social Policy* 48 (03): 569–94. https://doi.org/10.1017/S0047279418000715.
- Beaman, Lori, Raghabendra Chattopadhyay, Esther Duflo, Rohini Pande, and Petia Topalova. 2009. "Powerful Women: Does Exposure Reduce Bias?" *Quarterly Journal of Economics* 124 (4): 1497–

- 1540. https://doi.org/10.1162/qjec.2009.124.4.1497.
- Beaman, Lori, and Andrew Dillon. 2018. "Diffusion of Agricultural Information within Social Networks: Evidence on Gender Inequalities from Mali." *Journal of Developmental Economics* 133: 147–61.
- Beaman, Lori, Esther Duflo, Rohini Pande, and Petia Topalova. 2012. "Female Leadership Raises Aspirations and Educational Attainment for Girls: A Policy Experiment in India." *Science* 335 (6068): 582–86. https://doi.org/10.1126/science.1212382.
- Beaman, Lori, Dean Karlan, and Bram Thuysbaert. 2014. "Saving for a (Not so) Rainy Day: A Randomized Evaluation of Savings Groups in Mali." NBER Working Paper 20600. National Bureau of Economic Research.
- Beath, Andrew, Fotini Christia, and Ruben Enikolopov. 2013. "Empowering Women through Development Aid: Evidence from a Field Experiment in Afghanistan." *The American Political Science Review* 107 (3): 540–57.
- Bedoya, Guadalupe, Aidan Coville, Johannes Haushofer, Mohammad Isaqzadeh, and Jeremy Shapiro. 2019. "No Household Left Behind Afghanistan Targeting the Ultra Poor Impact Evaluation." Policy Research Working Paper 8877. World Bank Group.
- Belaid, L, A Dumont, N Chaillet, A Zertal, V De Brouwere, S Hounton, and V Ridde. 2016. "Effectiveness of Demand Generation Interventions on Use of Modern Contraceptives in Low- and Middle-Income Countries." *Tropical Medicine & International Health* 21 (10): 1240–54. https://doi.org/10.1111/tmi.12758.
- Bellows, Ben, Carol Bulaya, Sophie Inambwae, Craig L Lissner, Moazzam Ali, and Ashish Bajracharya. 2016. "Family Planning Vouchers in Low and Middle Income Countries: A Systematic Review." *Studies in Family Planning* 47 (4): 357–70. https://doi.org/10.1111/sifp.12006.
- Benhassine, Najy, Florencia Devoto, Esther Duflo, Pascaline Dupas, and Victor Pouliquen. 2015. "Turning a Shove into a Nudge? A 'Labeled Cash Transfer' for Education." *American Economic Journal: Economic Policy* 7 (3): 86–125. https://doi.org/10.1257/pol.20130225.
- Bergolo, Marcelo, and Estefanía Galván. 2018. "Intra-Household Behavioral Responses to Cash Transfer Programs. Evidence from a Regression Discontinuity Design." *World Development* 103 (March): 100–118. https://doi.org/10.1016/j.worlddev.2017.10.030.
- Bernhardt, Arielle, Erica Field, Rohini Pande, and Natalia Rigol. 2019. "Household Matters: Revisiting the Returns to Capital among Female Micro-Entrepreneurs." Working Paper.
- Bhalotra, Sonia, Irma Clots-Figueras, and Lakshmi Iyer. 2018. "Pathbreakers? Women's Electoral Success and Future Political Participation." *The Economic Journal* 128 (613): 1844–78. https://doi.org/10.1111/ecoj.12492.
- Bhavnani, Rikhil R. 2009. "Do Electoral Quotas Work after They Are Withdrawn? Evidence from a Natural Experiment in India." *The American Political Science Review* 103 (01): 23–35. https://doi.org/10.1017/S0003055409090029.
- Blackstone, Sarah R, Ucheoma Nwaozuru, and Juliet Iwelunmor. 2017. "Factors Influencing Contraceptive Use in Sub-Saharan Africa: A Systematic Review." *International Quarterly of Community Health Education* 37 (2): 79–91. https://doi.org/10.1177/0272684X16685254.
- Bold, Mara van den, Andrew Dillon, Deanna Olney, Marcellin Ouedraogo, Abdoulaye Pedehombga, and Agnes Quisumbing. 2015. "Can Integrated Agriculture-Nutrition Programmes Change Gender Norms on Land and Asset Ownership? Evidence from Burkina Faso." *The Journal of Development Studies* 51 (9): 1155–74. https://doi.org/10.1080/00220388.2015.1036036.
- Bold, Mara van den, Agnes R. Quisumbing, and Stuart Gillespie. 2013. "Women's Empowerment and

- Nutrition: An Evidence Review." IFPRI Discussion Paper 01294. International Food Policy Research Institute.
- Borker, Girija. 2018. "Safety First: Perceived Risk of Street Harassment and Educational Choices of Women." *Working Paper*.
- Bose, Nayana, and Shreyasee Das. 2017. "Women's Inheritance Rights, Household Allocation, and Gender Bias." *American Economic Review* 107 (5): 150–53. https://doi.org/10.1257/aer.p20171128.
- Brody, Carinne, Thomas de Hoop, Martina Vojtkova, Ruby Warnock, Megan Dunbar, Padmini Murthy, and Shari L. Dworkin. 2017. "Can Self-Help Group Programs Improve Women's Empowerment? A Systematic Review." *Journal of Development Effectiveness* 9 (1): 15–40. https://doi.org/10.1080/19439342.2016.1206607.
- Brooks, Wyatt, Kevin Donovan, and Terence R. Johnson. 2018. "Mentors or Teachers? Microenterprise Training in Kenya." *American Economic Journal: Applied Economics* 10 (4): 196–221. https://doi.org/10.1257/app.20170042.
- Buchmann, Nina, Erica Field, Rachel Glennerster, Shahana Nazneen, Svetlana Pimkina, and Iman Sen. 2018. "Power vs Money: Alternative Approaches to Reducing Child Marriage in Bangladesh, a Randomized Control Trial." Working Paper.
- Buehren, Niklas, Shubha Chakravarty, Markus Goldstein, Vanya Slavchevska, and Munshi Sulaiman. 2017. "Adolescent Girls' Empowerment in Conflict-Affected Settings: Experimental Evidence from South Sudan." Working Paper.
- Buehren, Niklas, Markus Goldstein, Selim Gulesci, Munshi Sulaiman, and Venus Yam. 2017. "Evaluation of an Adolescent Development Program for Girls in Tanzania." Policy Research Working Paper 7961. World Bank Group.
- Buller, Ana Maria, Melissa Hidrobo, Amber Peterman, and Lori Heise. 2016. "The Way to a Man's Heart Is through His Stomach?: A Mixed Methods Study on Causal Mechanisms through Which Cash and in-Kind Food Transfers Decreased Intimate Partner Violence." *BMC Public Health* 16 (June): 488. https://doi.org/10.1186/s12889-016-3129-3.
- Buller, Ana Maria, Amber Peterman, Meghna Ranganathan, Alexandra Bleile, Melissa Hidrobo, and Lori Heise. 2018. "A Mixed-Method Review of Cash Transfers and Intimate Partner Violence in Lowand Middle-Income Countries." *The World Bank Research Observer* 33 (2): 218–58. https://doi.org/10.1093/wbro/lky002.
- Bulte, Erwin, and Robert Lensink. 2019. "Women's Empowerment and Domestic Abuse: Experimental Evidence from Vietnam." *European Economic Review* 115 (June): 172–91. https://doi.org/10.1016/j.euroecorev.2019.03.003.
- Bulte, Erwin, Robert Lensink, and Nhung Vu. 2016. "Gender Training and Female Empowerment: Experimental Evidence from Vietnam." *Economics Letters* 145 (August): 117–19. https://doi.org/10.1016/j.econlet.2016.06.003.
- ——. 2017. "Do Gender and Business Trainings Affect Business Outcomes? Experimental Evidence from Vietnam." *Management Science* 63 (9): 2885–2902. https://doi.org/10.1287/mnsc.2016.2472.
- Buntaine, Mark T, Brigham Daniels, and Colleen Devlin. 2018. "Can Information Outreach Increase Participation in Community-Driven Development? A Field Experiment Near Bwindi National Park, Uganda." *World Development* 106: 407–21.
- Bursztyn, Leonardo, Alessandra González, and David Yanagizawa-Drott. 2018. "Misperceived Social Norms: Female Labor Force Participation in Saudi Arabia." Cambridge, MA: National Bureau of Economic Research. https://doi.org/10.3386/w24736.

- Buvinic, Mayra, and Rebecca Furst-Nichols. 2014. "Promoting Women's Economic Empowerment: What Works?" Policy Research Working Paper 7087. World Bank Group.
- Carney, Conor, and Monica Harber Carney. 2018. "Impact of Soil Conservation Adoption on Intra-Household Allocations in Zambia." *Review of Development Economics* 22 (4): 1390–1408. https://doi.org/10.1111/rode.12397.
- Casey, Katherine, Rachel Glennerster, and Edward Miguel. 2012. "Reshaping Institutions: Evidence on Aid Impacts Using a Preanalysis Plan." *The Quarterly Journal of Economics* 127 (4): 1755–1812. https://doi.org/10.1093/qje/qje027.
- Cassidy, Rachel, Marije Groot Bruinderink, Wendy Janssens, and Karlijn Morsink. 2018. "The Power to Protect: Household Bargaining and Female Condom Use." CSAE Working Paper 2018–08. Oxford: Centre for the Study of African Economies.
- Castilla, Carolina. 2018. "Political Role Models and Child Marriage in India." *Review of Development Economics* 22 (4): 1409–31. https://doi.org/10.1111/rode.12513.
- Chakravarty, Shubha, Mattias Lundberg, Plamen Nikolov, and Juliane Zenker. 2019. "Vocational Training Programs and Youth Labor Market Outcomes: Evidence from Nepal." *Journal of Development Economics* 136 (January): 71–110. https://doi.org/10.1016/j.jdeveco.2018.09.002.
- Chattopadhyay, Raghabendra, and Esther Duflo. 2004. "Women as Policy Makers: Evidence from a Randomized Policy Experiment in India." *Econometrica : Journal of the Econometric Society* 72 (5): 1409–43. https://doi.org/10.1111/j.1468-0262.2004.00539.x.
- Chaudhry, Zain, Karrar Hussain, and Muhammad Yasir Khan. 2019. "Mobilizing Women Voters: Experimental Evidence from Pakistan." Working Paper.
- Cherchi, Ludovica, Markus Goldstein, James Habyarimana, Joao Montalvao, Michael O Sullivan, and Chris Udry. 2018. "Incentives for Joint Land Titling: Experimental Evidence from Uganda." Working Paper. Washington DC.
- Clark, Shelley, Caroline W Kabiru, Sonia Laszlo, and Stella Muthuri. 2019. "The Impact of Childcare on Poor Urban Women's Economic Empowerment in Africa." *Demography* 56 (4): 1247–1272. https://doi.org/10.1007/s13524-019-00793-3.
- Clayton, Amanda. 2015. "Women's Political Engagement under Quota-Mandated Female Representation: Evidence from a Randomized Policy Experiment." *Comparative Political Studies* 48 (3): 333–69. https://doi.org/10.1177/0010414014548104.
- Cunningham, Kenda, Marie Ruel, Elaine Ferguson, and Ricardo Uauy. 2015. "Women's Empowerment and Child Nutritional Status in South Asia: A Synthesis of the Literature." *Maternal & Child Nutrition* 11 (1): 1–19. https://doi.org/10.1111/mcn.12125.
- Dean, Joshua T, and Seema Jayachandran. 2019. "Changing Family Attitudes to Promote Female Employment." *American Economic Association Papers and Proceedings* 109 (May): 138–42.
- Decker, Michele R, Shannon N Wood, Esther Ndinda, Gayane Yenokyan, Jacob Sinclair, Nankali Maksud, Brendan Ross, Benjamin Omondi, and Martin Ndirangu. 2018. "Sexual Violence among Adolescent Girls and Young Women in Malawi: A Cluster-Randomized Controlled Implementation Trial of Empowerment Self-Defense Training." *BMC Public Health* 18 (1): 1341. https://doi.org/10.1186/s12889-018-6220-0.
- Deininger, Klaus, Aparajita Goyal, and Hari Nagarajan. 2010. "Inheritance Law Reform and Women's Access to Capital Evidence from India's Hindu Succession Act." Policy Research Working Paper 5338. The World Bank.
- Deininger, Klaus, Songqing Jin, Hari K. Nagarajan, and Fang Xia. 2015. "Does Female Reservation

- Affect Long-Term Political Outcomes? Evidence from Rural India." *The Journal of Development Studies* 51 (1): 32–49. https://doi.org/10.1080/00220388.2014.947279.
- Demirguc-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess. 2018. "The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution." Washington, DC: World Bank Group.
- Desai, Jaikishan, and Alessandro Tarozzi. 2011. "Microcredit, Family Planning Programs, and Contraceptive Behavior: Evidence from a Field Experiment in Ethiopia." *Demography* 48 (2): 749–82. https://doi.org/10.1007/s13524-011-0029-0.
- Desai, Raj M, and Shareen Joshi. 2013. "Collective Action and Community Development: Evidence from Women's Self-Help Groups in Rural India." Policy Research Working Paper 6547. The World Bank.
- Dhar, Diva, Tarun Jain, and Seema Jayachandran. 2018. "Reshaping Adolescents' Gender Attitudes: Evidence from a School-Based Experiment in India." NBER Working Paper 25331. National Bureau of Economic Research.
- Diaz-Martin, Lucia, Rachel Glennerster, and Claire Walsh. 2018. "A Practical Guide to Measuring Women's and Girls' Empowerment in Impact Evaluations." Abdul Latif Jameel Poverty Action Lab.
- Donald, Aletheia, Gayatri Koolwal, Jeannie Annan, Kathryn Falb, and Markus Goldstein. 2017. "Measuring Women's Agency." Policy Research Working Paper 8184. World Bank Group.
- Doyle, Kate, Ruti G Levtov, Gary Barker, Gautam G Bastian, Jeffrey B Bingenheimer, Shamsi Kazimbaya, Anicet Nzabonimpa, et al. 2018. "Gender-Transformative Bandebereho Couples' Intervention to Promote Male Engagement in Reproductive and Maternal Health and Violence Prevention in Rwanda: Findings from a Randomized Controlled Trial." *Plos One* 13 (4): e0192756. https://doi.org/10.1371/journal.pone.0192756.
- Duflo, Esther, Pascaline Dupas, and Michael Kremer. 2015. "Education, HIV, and Early Fertility: Experimental Evidence from Kenya." *The American Economic Review* 105 (9): 2757–97. https://doi.org/10.1257/aer.20121607.
- Dupas, Pascaline. 2011. "Do Teenagers Respond to HIV Risk Information? Evidence from a Field Experiment in Kenya." *American Economic Journal: Applied Economics* 3 (1): 1–34. https://doi.org/10.1257/app.3.1.1.
- Dupas, Pascaline, and Jonathan Robinson. 2013. "Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya." *American Economic Journal: Applied Economics* 5 (1): 163–92. https://doi.org/10.1257/app.5.1.163.
- El-Khoury, Marianne, Rebecca Thornton, Minki Chatterji, Sarah Kamhawi, Phoebe Sloane, and Mays Halassa. 2016. "Counseling Women and Couples on Family Planning: A Randomized Study in Jordan." *Studies in Family Planning* 47 (3): 222–38. https://doi.org/10.1111/sifp.69.
- Fafchamps, Marcel, David McKenzie, Simon Quinn, and Christopher Woodruff. 2014. "Microenterprise Growth and the Flypaper Effect: Evidence from a Randomized Experiment in Ghana." *Journal of Development Economics* 106 (January): 211–26. https://doi.org/10.1016/j.jdeveco.2013.09.010.
- Feigenberg, Benjamin, Erica Field, and Rohini Pande. 2013. "The Economic Returns to Social Interaction: Experimental Evidence from Microfinance." *The Review of Economic Studies* 80 (4): 1459–83. https://doi.org/10.1093/restud/rdt016.
- Feigenberg, Benjamin, Erica Field, Rohini Pande, Natalia Rigol, and Shayak Sarkar. 2014. "Do Group Dynamics Influence Social Capital Gains among Microfinance Clients? Evidence from a Randomized Experiment in Urban India." *Journal of Policy Analysis and Management* 33 (4): 932–

- 49. https://doi.org/10.1002/pam.21790.
- Feldman, Becca S., Alan M. Zaslavsky, Majid Ezzati, Karen E. Peterson, and Marc Mitchell. 2009. "Contraceptive Use, Birth Spacing, and Autonomy: An Analysis of the *Oportunidades* Program in Rural Mexico." *Studies in Family Planning* 40 (1): 51–62. https://doi.org/10.1111/j.1728-4465.2009.00186.x.
- Ferrara, Eliana La, Alberto Chong, and Suzanne Duryea. 2012. "Soap Operas and Fertility: Evidence from Brazil." *American Economic Journal: Applied Economics* 4 (4): 1–31. https://doi.org/10.1257/app.4.4.1.
- Fiala, Nathan. 2018a. "Business Is Tough, but Family Is Worse: Household Bargaining and Investment Decisions in Uganda." Working Paper.
- ———. 2018b. "Returns to Microcredit, Cash Grants and Training for Male and Female Microentrepreneurs in Uganda." *World Development* 105 (May): 189–200. https://doi.org/10.1016/j.worlddev.2017.12.027.
- Field, Erica, Rachel Glennerster, and Shahana Nazneen. 2018. "Economic Empowerment of Young Women in Bangladesh: Barriers and Strategies." In *Women at Work: Addressing the Gaps*, edited by Carolina Robino and Raquel Tebaldi, 15 (1):31–32. Policy in Focus. International Policy Centre for Inclusive Growth.
- Field, Erica, Seema Jayachandran, Rohini Pande, and Natalia Rigol. 2016. "Friendship at Work: Can Peer Effects Catalyze Female Entrepreneurship?" *American Economic Journal: Economic Policy* 8 (2): 125–53. https://doi.org/10.1257/pol.20140215.
- Field, Erica, Rohini Pande, Natalia Rigol, Simone Schaner, and Charity Troyer Moore. 2019. "On Her Account: Can Strengthening Women's Financial Control Boost Female Labor Supply?" NBER Working Paper 26294. National Bureau of Economic Research.
- Fleming, Paul J, Jay Silverman, Mohan Ghule, Julie Ritter, Madhusudana Battala, Gajanan Velhal, Saritha Nair, et al. 2018. "Can a Gender Equity and Family Planning Intervention for Men Change Their Gender Ideology? Results from the CHARM Intervention in Rural India." *Studies in Family Planning* 49 (1): 41–56. https://doi.org/10.1111/sifp.12047.
- Gallego, Francisco A., Cristian Larroulet, and Andrea Repetto. 2018. "What's behind Her Smile? Looks, Self-Esteem, and Labor Market Outcomes." LACEA Working Paper Series 0018. LACEA.
- Gash, Megan. 2017. "Understanding the Impact of Savings Groups." Learning Brief. SEEP.
- Giné, Xavier, and Ghazala Mansuri. 2018. "Together We Will: Experimental Evidence on Female Voting Behavior in Pakistan." *American Economic Journal: Applied Economics* 10 (1): 207–35. https://doi.org/10.1257/app.20130480.
- Giorgi, Giacomo De, Jesse Cunha, and Gabriela Calderon. 2018. "Business Literacy and Development: Evidence from a Randomized Controlled Trial in Rural Mexico." *Economic Development and Cultural Change*, October, 701213. https://doi.org/10.1086/701213.
- Gitter, Seth R, and Bradford L Barham. 2008. "Women's Power, Conditional Cash Transfers, and Schooling in Nicaragua." *World Bank Economic Review* 22 (2): 271–90.
- Glassman, Amanda, Denizhan Duran, Lisa Fleisher, Daniel Singer, Rachel Sturke, Gustavo Angeles, Jodi Charles, et al. 2013. "Impact of Conditional Cash Transfers on Maternal and Newborn Health." *Journal of Health, Population, and Nutrition* 31 (4 Suppl 2): 48–66.
- Grace, Karen Trister, and Christina Fleming. 2016. "A Systematic Review of Reproductive Coercion in International Settings." *World Medical & Health Policy* 8 (4): 382–408. https://doi.org/10.1002/wmh3.209.

- Gram, Lu, Joanna Morrison, Naomi Saville, Shyam Sundar Yadav, Bhim Shrestha, Dharma Manandhar, Anthony Costello, and Jolene Skordis-Worrall. 2018. "Do Participatory Learning and Action Women's Groups Alone or Combined with Cash or Food Transfers Expand Women's Agency in Rural Nepal?" *The Journal of Development Studies* 55 (8): 1–17. https://doi.org/10.1080/00220388.2018.1448069.
- Gram, Lu, Jolene Skordis-Worrall, Dharma S Manandhar, Daniel Strachan, Joanna Morrison, Naomi Saville, David Osrin, Kirti M Tumbahangphe, Anthony Costello, and Michelle Heys. 2018. "The Long-Term Impact of Community Mobilisation through Participatory Women's Groups on Women's Agency in the Household: A Follow-up Study to the Makwanpur Trial." *Plos One* 13 (5): e0197426. https://doi.org/10.1371/journal.pone.0197426.
- Green, Donald P, Anna Wilke, and Jasper Cooper. 2018. "Silence Begets Violence: A Mass Media Experiment to Prevent Violence against Women in Rural Uganda." Working Paper.
- Green, Eric P, Christopher Blattman, Julian Jamison, and Jeannie Annan. 2015. "Women's Entrepreneurship and Intimate Partner Violence: A Cluster Randomized Trial of Microenterprise Assistance and Partner Participation in Post-Conflict Uganda (SSM-D-14-01580R1)." *Social Science & Medicine* 133 (May): 177–88. https://doi.org/10.1016/j.socscimed.2015.03.042.
- Grillos, Tara. 2018. "Women's Participation in Environmental Decision-Making: Quasi-Experimental Evidence from Northern Kenya." *World Development* 108 (August): 115–30. https://doi.org/10.1016/j.worlddev.2018.03.017.
- Groh, Matthew, Nandini Krishnan, David McKenzie, and Tara Vishwanath. 2012. "Soft Skills or Hard Cash? The Impact of Training and Wage Subsidy Programs on Female Youth Employment in Jordan." Policy Research Working Paper 6141. The World Bank.
- ———. 2016. "The Impact of Soft Skills Training on Female Youth Employment: Evidence from a Randomized Experiment in Jordan." *IZA Journal of Labor & Development* 5 (1): 9. https://doi.org/10.1186/s40175-016-0055-9.
- Gupta, Jhumka, Kathryn L Falb, Heidi Lehmann, Denise Kpebo, Ziming Xuan, Mazeda Hossain, Cathy Zimmerman, Charlotte Watts, and Jeannie Annan. 2013. "Gender Norms and Economic Empowerment Intervention to Reduce Intimate Partner Violence against Women in Rural Côte d'Ivoire: A Randomized Controlled Pilot Study." *BMC International Health and Human Rights* 13 (November): 46. https://doi.org/10.1186/1472-698X-13-46.
- Halim, Daniel, Hillary C Johnson, and Elizaveta Perova. 2019. "Preschool Availability and Female Labor Force Participation Evidence from Indonesia." Policy Research Working Paper 8915. World Bank Group.
- Hallfors, Denise, Hyunsan Cho, Simbarashe Rusakaniko, Bonita Iritani, John Mapfumo, and Carolyn Halpern. 2011. "Supporting Adolescent Orphan Girls to Stay in School as HIV Risk Prevention: Evidence from a Randomized Controlled Trial in Zimbabwe." *American Journal of Public Health* 101 (6): 1082–88. https://doi.org/10.2105/AJPH.2010.300042.
- Hallward-Driemeier, Mary, and Ousman Gajigo. 2015. "Strengthening Economic Rights and Women's Occupational Choice: The Impact of Reforming Ethiopia's Family Law." *World Development* 70 (June): 260–73. https://doi.org/10.1016/j.worlddev.2015.01.008.
- Handa, Sudhanshu, Amber Peterman, Benjamin Davis, and Marco Stampini. 2009. "Opening up Pandora's Box: The Effect of Gender Targeting and Conditionality on Household Spending Behavior in Mexico's Progresa Program." *World Development* 37 (6): 1129–42. https://doi.org/10.1016/j.worlddev.2008.10.005.

- Handa, Sudhanshu, Amber Peterman, Carolyn Huang, Carolyn Halpern, Audrey Pettifor, and Harsha Thirumurthy. 2015. "Impact of the Kenya Cash Transfer for Orphans and Vulnerable Children on Early Pregnancy and Marriage of Adolescent Girls." *Social Science & Medicine* 141 (September): 36–45. https://doi.org/10.1016/j.socscimed.2015.07.024.
- Hanmer, Lucia, and Jeni Klugman. 2016. "Exploring Women's Agency and Empowerment in Developing Countries: Where Do We Stand?" *Feminist Economics* 22 (1): 237–63. https://doi.org/10.1080/13545701.2015.1091087.
- Haushofer, Johannes, Charlotte Ringdal, Jeremy Shapiro, and Xiao Yu Wang. 2019. "Income Changes and Intimate Partner Violence: Evidence from Unconditional Cash Transfers in Kenya." https://doi.org/10.3386/w25627.
- Heath, Rachel, and A M Mobarak. 2015. "Manufacturing Growth and the Lives of Bangladeshi Women." *Journal of Development Economics* 115 (July): 1–15. https://doi.org/10.1016/j.jdeveco.2015.01.006.
- Hidrobo, Melissa, and Lia Fernald. 2013. "Cash Transfers and Domestic Violence." *Journal of Health Economics* 32 (1): 304–19. https://doi.org/10.1016/j.jhealeco.2012.11.002.
- Hidrobo, Melissa, Amber Peterman, and Lori Heise. 2016. "The Effect of Cash, Vouchers, and Food Transfers on Intimate Partner Violence: Evidence from a Randomized Experiment in Northern Ecuador." *American Economic Journal: Applied Economics* 8 (3): 284–303. https://doi.org/10.1257/app.20150048.
- Hoffmann, Vivian, Vijayendra Rao, Vaishnavi Surendra, and Upamanyu Datta. 2017. "Relief from Usury: Impact of a Community-Based Microcredit Program in Rural India." Policy Research Working Paper 8021. World Bank Group.
- Holden, Jenny, Macartan Humphreys, Sohail Husain, Sarah Khan, and Summer Lindsey. 2016. "Evaluation of the Madhya Pradesh Safe Cities Initiative 2013-2016: Endline Report." DFID India.
- Ibrahim, Solava, and Sabina Alkire. 2007. "Agency and Empowerment: A Proposal for Internationally Comparable Indicators." *Oxford Development Studies* 35 (4): 379–403. https://doi.org/10.1080/13600810701701897.
- Ikenwilo, Divine, Damilola Olajide, Olufemi Obembe, Ngozi Ibeji, and Rufus Akindola. 2016. "The Impact of a Rural Microcredit Scheme on Women's Household Vulnerability and Empowerment: Evidence from South West Nigeria." Working Paper 2016–01. Partnership for Economic Policy.
- International Labour Organization. 2019a. "Labor Force Participation Rate, Female (% of Female Population Ages 15+) (Modeled ILO Estimate) ." ILOSTAT Database. April 2019. https://data-worldbank-org.libproxy.lib.unc.edu/indicator/SL.TLF.CACT.FE.ZS.
- ——. 2019b. "Labor Force Participation Rate, Female (% of Female Population Ages 15+) (Modeled ILO Estimate) Middle East North Africa." ILOSTAT Database. April 2019. https://data-worldbank-org.libproxy.lib.unc.edu/indicator/SL.TLF.CACT.FE.ZS?locations=ZQ.
- ———. 2019c. "Labor Force Participation Rate, Female (% of Female Population Ages 15+) (Modeled ILO Estimate) South Asia." ILOSTAT Database. April 2019. https://data-worldbank-org.libproxy.lib.unc.edu/indicator/SL.TLF.CACT.FE.ZS?locations=8s.
- ———. 2019d. "Self-Employed, Total (% of Total Employment) (Modeled ILO Estimate)." ILOSTAT Database. April 2019. https://data-worldbank-org.libproxy.lib.unc.edu/indicator/SL.EMP.SELF.ZS?end=2018&locations=XO&start=2018&view=bar.
- Ismayilova, Leyla, Leyla Karimli, Eleni Gaveras, Alexice To-Camier, Jo Sanson, Josh Chaffin, and Rachel Nanema. 2018. "An Integrated Approach to Increasing Women's Empowerment Status and

- Reducing Domestic Violence: Results of a Cluster-Randomized Controlled Trial in a West African Country." *Psychology of Violence* 8 (4): 448.
- Iyer, Lakshmi, Anandi Mani, Prachi Mishra, and Petia Topalova. 2012. "The Power of Political Voice: Women's Political Representation and Crime in India." *American Economic Journal: Applied Economics* 4 (4): 165–93. https://doi.org/10.1257/app.4.4.165.
- James-Hawkins, Laurie, Courtney Peters, Kristin VanderEnde, Lauren Bardin, and Kathryn M Yount. 2018. "Women's Agency and Its Relationship to Current Contraceptive Use in Lower- and Middle-Income Countries: A Systematic Review of the Literature." *Global Public Health* 13 (7): 843–58. https://doi.org/10.1080/17441692.2016.1239270.
- Jayachandran, Seema. 2015. "The Roots of Gender Inequality in Developing Countries." *Annual Review of Economics* 7 (1): 63–88. https://doi.org/10.1146/annurev-economics-080614-115404.
- Jejeebhoy, Shireen J, K Santhya, Rajib Acharya, A J Francis Zavier, Neelanjana Pandey, Santosh Kumar Singh, Komal Saxena, et al. 2017. "Empowering Women and Addressing Violence against Them through Self-Help Groups (SHGs)." New Delhi: Population Council.
- Jensen, Robert. 2012. "Do Labor Market Opportunities Affect Young Women's Work and Family Decisions? Experimental Evidence from India." *The Quarterly Journal of Economics* 127 (2): 753–92. https://doi.org/10.1093/qje/qjs002.
- Jewkes, Rachel, Michael Flood, and James Lang. 2015. "From Work with Men and Boys to Changes of Social Norms and Reduction of Inequities in Gender Relations: A Conceptual Shift in Prevention of Violence against Women and Girls." *The Lancet* 385 (9977): 1580–89. https://doi.org/10.1016/S0140-6736(14)61683-4.
- Joshi, Shareen, Nethra Palaniswamy, and Vijayendra Rao. 2015. "Impact Evaluation Framework and Results: Odisha Rural Livelihood Project." *The World Bank*.
- Kabeer, Naila. 1999. "Resources, Agency, Achievements: Reflections on the Measurement of Women's Empowerment." *Development and Change* 30: 435–64.
- ———. 2005. "Gender Equality and Women's Empowerment: A Critical Analysis of the Third Millennium Development Goal 1." *Gender & Development* 13 (1): 13–24. https://doi.org/10.1080/13552070512331332273.
- Kalamar, Amanda M, Susan Lee-Rife, and Michelle J Hindin. 2016. "Interventions to Prevent Child Marriage Among Young People in Low- and Middle-Income Countries: A Systematic Review of the Published and Gray Literature." *The Journal of Adolescent Health* 59 (3 Suppl): S16-21. https://doi.org/10.1016/j.jadohealth.2016.06.015.
- Karlan, Dean, Beniamino Savonitto, Bram Thuysbaert, and Christopher Udry. 2017. "Impact of Savings Groups on the Lives of the Poor." *Proceedings of the National Academy of Sciences of the United States of America* 114 (12): 3079–84. https://doi.org/10.1073/pnas.1611520114.
- Karlan, Dean, Bram Thuysbaert, and Bobbi Gray. 2017. "Credit with Health Education in Benin: A Cluster Randomized Trial Examining Impacts on Knowledge and Behavior." *The American Journal of Tropical Medicine and Hygiene* 96 (2): 501–10. https://doi.org/10.4269/ajtmh.16-0126.
- Karlan, Dean, and Martin Valdivia. 2011. "Teaching Entrepreneurship: Impact of Business Training on Microfinance Clients and Institutions." *The Review of Economics and Statistics* 93 (2): 510–27.
- Kavanaugh, Guadalupe, Maria Micaela Sviatschi, and Iva Trako. 2019. "Female Officers, Gender Violence and Human Capital: Evidence from All-Women's Justice Centers in Peru." Working Paper. https://doi.org/10.2139/ssrn.3022670.
- Khan, M E, Avishek Hazra, Aastha Kant, and Moazzam Ali. 2016. "Conditional and Unconditional Cash

- Transfers to Improve Use of Contraception in Low and Middle Income Countries: A Systematic Review." *Studies in Family Planning* 47 (4): 371–83. https://doi.org/10.1111/sifp.12004.
- Kidman, Rachel. 2017. "Child Marriage and Intimate Partner Violence: A Comparative Study of 34 Countries." *International Journal of Epidemiology* 46 (2): 662–75. https://doi.org/10.1093/ije/dyw225.
- Kilburn, Kelly N, Audrey Pettifor, Jessie K Edwards, Amanda Selin, Rhian Twine, Catherine MacPhail, Ryan Wagner, James P Hughes, Jing Wang, and Kathleen Kahn. 2018. "Conditional Cash Transfers and the Reduction in Partner Violence for Young Women: An Investigation of Causal Pathways Using Evidence from a Randomized Experiment in South Africa (HPTN 068)." *Journal of the International AIDS Society* 21 Suppl 1 (February). https://doi.org/10.1002/jia2.25043.
- Kim, Julia, Giulia Ferrari, Tanya Abramsky, Charlotte Watts, James Hargreaves, Linda Morison, Godfrey Phetla, John Porter, and Paul Pronyk. 2009. "Assessing the Incremental Effects of Combining Economic and Health Interventions: The IMAGE Study in South Africa." *Bulletin of the World Health Organization* 87 (11): 824–32. https://doi.org/10.2471/blt.08.056580.
- Kim, Julia, Charlotte H Watts, James R Hargreaves, Luceth X Ndhlovu, Godfrey Phetla, Linda A Morison, Joanna Busza, John D H Porter, and Paul Pronyk. 2007. "Understanding the Impact of a Microfinance-Sased Intervention on Women's Empowerment and the Reduction of Intimate Partner Violence in South Africa." *American Journal of Public Health* 97 (10): 1794–1802.
- Klugman, Jeni, Lucia Hanmer, Sarah Twigg, Tazeen Hasan, Jennifer McCleary-Sills, and Julieth Santamaria. 2014. "Voice and Agency: Empowering Women and Girls for Shared Prosperity." Washington DC: World Bank Group.
- Kotsadam, Andreas, and Espen Villanger. 2019. "Jobs and Intimate Partner Violence-Evidence from a Field Experiment in Ethiopia." Working Paper.
- Kraft, Joan Marie, Karin Gwinn Wilkins, Guiliana J Morales, Monique Widyono, and Susan E Middlestadt. 2014. "An Evidence Review of Gender-Integrated Interventions in Reproductive and Maternal-Child Health." *Journal of Health Communication* 19 Suppl 1: 122–41. https://doi.org/10.1080/10810730.2014.918216.
- Ksoll, Christopher, Helene Bie Lilleør, Jonas Helth Lønborg, and Ole Dahl Rasmussen. 2016. "Impact of Village Savings and Loan Associations: Evidence from a Cluster Randomized Trial." *Journal of Development Economics* 120 (May): 70–85. https://doi.org/10.1016/j.jdeveco.2015.12.003.
- Laszlo, Sonia, Kate Grantham, Ecem Oskay, and Tingting Zhang. 2017. "Grappling with the Challenges of Measuring Women's Economic Empowerment." Research Contribution Paper 2017–12. Institute for the Study of International Development.
- Lecoutere, Els, David J. Spielman, and Bjorn Van Campenhout. 2019. "Women's Empowerment, Agricultural Extension, and Digitalization: Disentangling Information and Role Model Effects in Rural Uganda." 0 ed. Washington, DC: International Food Policy Research Institute. https://doi.org/10.2499/p15738coll2.133523.
- Leventhal, Katherine Sachs, Lisa M DeMaria, Jane E Gillham, Gracy Andrew, John Peabody, and Steve M Leventhal. 2016. "A Psychosocial Resilience Curriculum Provides the 'Missing Piece' to Boost Adolescent Physical Health: A Randomized Controlled Trial of Girls First in India." *Social Science & Medicine* 161 (May): 37–46. https://doi.org/10.1016/j.socscimed.2016.05.004.
- Leventhal, Katherine Sachs, Jane Gillham, Lisa DeMaria, Gracy Andrew, John Peabody, and Steve Leventhal. 2015. "Building Psychosocial Assets and Wellbeing among Adolescent Girls: A Randomized Controlled Trial." *Journal of Adolescence* 45 (December): 284–95.

- https://doi.org/10.1016/j.adolescence.2015.09.011.
- Loiseau, Justin, and Claire Walsh. 2015. "Where Credit Is Due." J-PAL and IPA Policy Bulletin. Cambridge, MA: Abdul Latif Jameel Poverty Action Lab and Innovations for Poverty Action.
- López Bóo, Florencia, Martín A. Rossi, and Sergio S. Urzúa. 2013. "The Labor Market Return to an Attractive Face: Evidence from a Field Experiment." *Economics Letters* 118 (1): 170–72. https://doi.org/10.1016/j.econlet.2012.10.016.
- Lopez-Arana, Sandra, Mauricio Avendano, Frank J van Lenthe, and Alex Burdorf. 2016. "The Impact of a Conditional Cash Transfer Programme on Determinants of Child Health: Evidence from Colombia." *Public Health Nutrition* 19 (14): 2629–42. https://doi.org/10.1017/S1368980016000240.
- Lybbert, Travis J, and Bruce Wydick. 2016. "Hope as Aspirations, Agency, and Pathways: Poverty Dynamics and Microfinance in Oaxaca." Working Paper 22661. National Bureau of Economic Research.
- Malhotra, Anju, Sidney Ruth Schuler, and Carol Boender. 2002. "Measuring Women's Empowerment as a Variable in International Development." Background Paper Prepared for the World Bank Workshop on Poverty and Gender: New Perspectives. Washington, DC: The World Bank.
- Marcus, Rachel, Caroline Harper, Sophie Brodbeck, and Ella Page. 2015a. "How Do Gender Norms Change?" London: Overseas Development Institute.
- ———. 2015b. "Social Norms, Gender Norms, and Adolescent Girls: A Brief Guide." London, UK: Overseas Development Institute. https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9818.pdf.
- Martínez A., Claudia, and Marcela Perticará. 2017. "Childcare Effects on Maternal Employment: Evidence from Chile." *Journal of Development Economics* 126 (May): 127–37. https://doi.org/10.1016/j.jdeveco.2017.01.001.
- Martinez-Restrepo, Susana, and Laura Ramos-Jaimes. 2017. "Measuring Women's Economic Empowerment: Lessons from South America." Springfield, VA: International Development Research Centre.
- Mckelway, Madeline. 2018. "Women's Self-Efficacy and Women's Employment: Experimental Evidence from India." Working Paper.
- McKenzie, David, and Susana Puerto. 2017. "Growing Markets Through Business Training for Female Entrepreneurs: A Market-Level Randomized Experiment in Kenya." Policy Research Working Paper 7993. World Bank Group.
- McKenzie, David, and Christopher Woodruff. 2014. "What Are We Learning from Business Training and Entrepreneurship Evaluations around the Developing World?" *The World Bank Research Observer* 29 (1): 48–82. https://doi.org/10.1093/wbro/lkt007.
- ———. 2015. "Business Practices in Small Firms in Developing Countries." Cambridge, MA: National Bureau of Economic Research. https://doi.org/10.3386/w21505.
- MEASURE Evaluation. 2019. "Gender Tools." 2019. https://www.measureevaluation.org/resources/tools/gender.
- Mel, Suresh de, David McKenzie, and Christopher Woodruff. 2014. "Business Training and Female Enterprise Start-up, Growth, and Dynamics: Experimental Evidence from Sri Lanka." *Journal of Development Economics* 106 (January): 199–210. https://doi.org/10.1016/j.jdeveco.2013.09.005.
- Merttens, Fred, Alex Hurrell, Marta Marzi, Ramla Attah, Maham Farhat, Andrew Kardan, and Ian Macauslan. 2013. "Kenya Hunger Safety Net Programme Monitoring and Evaluation Component: Impact Evaluation Final Report 2009 to 2012." Oxford Policy Management.

- Mueller, Valerie, Lucy Billings, Tewodaj Mogues, Amber Peterman, and Ayala Wineman. 2017. "Filling the Legal Void? Impacts of a Community-Based Legal Aid Program on Women's Land-Related Knowledge, Attitudes, and Practices." *Oxford Development Studies* 46 (4): 1–17. https://doi.org/10.1080/13600818.2017.1414174.
- Mukherjee, Priya. 2017. "The Effects of Social Identity on Aspirations and Learning Outcomes: A Field Experiment in Rural India." Working Paper.
- Mwaikambo, Lisa, Ilene S Speizer, Anna Schurmann, Gwen Morgan, and Fariyal Fikree. 2011. "What Works in Family Planning Interventions: A Systematic Review." *Studies in Family Planning* 42 (2): 67–82. https://doi.org/10.1111/j.1728-4465.2011.00267.x.
- Naved, Ruchira Tabassum, Mahfuz Al Mamun, Sanjida Akhter Mourin, and Kausar Parvin. 2018. "A Cluster Randomized Controlled Trial to Assess the Impact of SAFE on Spousal Violence against Women and Girls in Slums of Dhaka, Bangladesh." *Plos One* 13 (6): e0198926. https://doi.org/10.1371/journal.pone.0198926.
- Neal, Sarah, Zoë Matthews, Melanie Frost, Helga Fogstad, Alma V Camacho, and Laura Laski. 2012. "Childbearing in Adolescents Aged 12-15 Years in Low Resource Countries: A Neglected Issue. New Estimates from Demographic and Household Surveys in 42 Countries." *Acta Obstetricia et Gynecologica Scandinavica* 91 (9): 1114–18. https://doi.org/10.1111/j.1600-0412.2012.01467.x.
- OECD Development Centre. 2019. "Social Institutions and Gender Index." 2019. https://www.genderindex.org/methodology/.
- Olney, Deanna K, Lilia Bliznashka, Abdoulaye Pedehombga, Andrew Dillon, Marie T Ruel, and Jessica Heckert. 2016. "A 2-Year Integrated Agriculture and Nutrition Program Targeted to Mothers of Young Children in Burkina Faso Reduces Underweight among Mothers and Increases Their Empowerment: A Cluster-Randomized Controlled Trial." *The Journal of Nutrition* 146 (5): 1109–17. https://doi.org/10.3945/jn.115.224261.
- Özler, Berk, Kelly Hallman, Marie-France Guimond, Elizabeth A Kelvin, Marian Rogers, and Esther Karnley. 2020. "Girl Empower A Gender Transformative Mentoring and Cash Transfer Intervention to Promote Adolescent Wellbeing: Impact Findings from a Cluster-Randomized Controlled Trial in Liberia." SSM Population Health 10 (April): 100527. https://doi.org/10.1016/j.ssmph.2019.100527.
- Pang, Xiaopeng, Junxia Zeng, and Scott Rozelle. 2013. "Does Women's Knowledge of Voting Rights Affect Their Voting Behaviour in Village Elections? Evidence from a Randomized Controlled Trial in China." *The China Quarterly* 213 (March): 39–59. https://doi.org/10.1017/S0305741012001531.
- ——. 2014. "Learning but Not Acting in Rural China." *Asian Survey* 54 (6): 1009–36. https://doi.org/10.1525/as.2014.54.6.1009.
- Peterman, Amber, Tia M Palermo, and Giulia Ferrari. 2018. "Still a Leap of Faith: Microfinance Initiatives for Reduction of Violence against Women and Children in Low-Income and Middle-Income Countries." *BMJ Global Health* 3 (6): e001143. https://doi.org/10.1136/bmjgh-2018-001143.
- Phiri, Mwelwa, R King, and J N Newell. 2015. "Behaviour Change Techniques and Contraceptive Use in Low and Middle Income Countries: A Review." *Reproductive Health* 12 (October): 100. https://doi.org/10.1186/s12978-015-0091-y.
- Polus, Stephanie, Simon Lewin, Claire Glenton, Priya M Lerberg, Eva Rehfuess, and A Metin Gülmezoglu. 2015. "Optimizing the Delivery of Contraceptives in Low- and Middle-Income Countries through Task Shifting: A Systematic Review of Effectiveness and Safety." *Reproductive Health* 12 (1): 27. https://doi.org/10.1186/s12978-015-0002-2.

- Prata, Ndola, Ashley Fraser, Megan J Huchko, Jessica D Gipson, Mellissa Withers, Shayna Lewis, Erica J Ciaraldi, and Ushma D Upadhyay. 2017. "Women's Empowerment and Family Planning: A Review of the Literature." *Journal of Biosocial Science* 49 (6): 713–43. https://doi.org/10.1017/S0021932016000663.
- Pratley, Pierre. 2016. "Associations between Quantitative Measures of Women's Empowerment and Access to Care and Health Status for Mothers and Their Children: A Systematic Review of Evidence from the Developing World." *Social Science & Medicine* 169 (August): 119–31. https://doi.org/10.1016/j.socscimed.2016.08.001.
- Prillaman, Soledad. 2017. "Strength in Numbers: How Women's Groups Close India's Political Gender Gap." Working Paper.
- Pronyk, Paul M, James R Hargreaves, Julia C Kim, Linda A Morison, Godfrey Phetla, Charlotte Watts, Joanna Busza, and John D H Porter. 2006. "Effect of a Structural Intervention for the Prevention of Intimate-Partner Violence and HIV in Rural South Africa: A Cluster Randomised Trial." *The Lancet* 368 (9551): 1973–83. https://doi.org/10.1016/S0140-6736(06)69744-4.
- Pronyk, Paul M, Trudy Harpham, Joanna Busza, Godfrey Phetla, Linda A Morison, James R Hargreaves, Julia C Kim, Charlotte H Watts, and John D Porter. 2008. "Can Social Capital Be Intentionally Generated? A Randomized Trial from Rural South Africa." *Social Science & Medicine* 67 (10): 1559–70. https://doi.org/10.1016/j.socscimed.2008.07.022.
- Quisumbing, Agnes, Deborah Rubin, and Katie Sproule. 2016. "Subjective Measures of Women's Economic Empowerment."
 - http://www.womeneconroadmap.org/sites/default/files/Wms%20Entrepreneurship_rev_clean.pdf.
- Raj, Anita, Mohan Ghule, Julie Ritter, Madhusudana Battala, Velhal Gajanan, Saritha Nair, Anindita Dasgupta, Jay G Silverman, Donta Balaiah, and Niranjan Saggurti. 2016. "Cluster Randomized Controlled Trial Evaluation of a Gender Equity and Family Planning Intervention for Married Men and Couples in Rural India." *Plos One* 11 (5): e0153190. https://doi.org/10.1371/journal.pone.0153190.
- Richards, Esther, Sally Theobald, Asha George, Julia C Kim, Christiane Rudert, Kate Jehan, and Rachel Tolhurst. 2013. "Going beyond the Surface: Gendered Intra-Household Bargaining as a Social Determinant of Child Health and Nutrition in Low and Middle Income Countries." *Social Science & Medicine* 95 (October): 24–33. https://doi.org/10.1016/j.socscimed.2012.06.015.
- Riley, Emma. 2018. "Hiding Loans in the Household Using Mobile Money: Experimental Evidence on Microenterprise Investment in Uganda." Working Paper.
- Rodella, Aude-Sophie, Facundo Cuevas, and Bernardo Atuesta. 2015. "Haiti Adolescent Girl Initiative (AGI): Project Report." 98201. World Bank Group.
- Roy, Sanchari. "Empowering women? Inheritance rights, female education and dowry payments in India." *Journal of Development Economics* 114 (2015): 233-251.
- Roy, Shalini, Melissa Hidrobo, John Hoddinott, and Akhter Ahmed. 2018. "Transfers, Behavior Change Communication, and Intimate Partner Violence Post-Program Evidence from Rural Bangladesh." *The Review of Economics and Statistics*, November, 1–45. https://doi.org/10.1162/rest_a_00791.
- Said, Farah, Mahreen Mahmud, Giovanna D'adda, and Azam Chaudhry. 2019. "Home-Bias among Female Entrepreneurs: Experimental Evidence on Preferences from Pakistan." Working Paper.
- Sapkal, Rahul Suresh. 2017. "From Mother to Daughter: Does Equal Inheritance Property Laws Reform Improve Female Labor Supply and Educational Attainments in India?" *Asian Journal of Law and Economics* 8 (1).

- Sarkar, Archana, Venkatraman Chandra-Mouli, Kushal Jain, Jagannath Behera, Surendra Kumar Mishra, and Sunil Mehra. 2015. "Community Based Reproductive Health Interventions for Young Married Couples in Resource-Constrained Settings: A Systematic Review." *BMC Public Health* 15 (October): 1037. https://doi.org/10.1186/s12889-015-2352-7.
- Scales, Peter C, Peter L Benson, Larry Dershem, Kathleen Fraher, Raphael Makonnen, Shahana Nazneen, Amy K Syvertsen, and Sarah Titus. 2013. "Building Developmental Assets to Empower Adolescent Girls in Rural Bangladesh: Evaluation of Project Kishoree Kontha." *Journal of Research on Adolescence* 23 (1): 171–84.
- Schaner, Simone. 2017. "The Cost of Convenience? Transaction Costs, Bargaining Power, and Savings Account Use in Kenya." *Journal of Human Resources* 52 (4): 919–45. https://doi.org/10.3368/jhr.52.4.0815-7350R1.
- Sedlmayr, Richard, Anuj Shah, and Munshi Sulaiman. 2018. "Cash-Plus: Poverty Impacts of Transfer-Based Intervention Alternatives." CSAE Working Paper 2017-15–2. Oxford: Centre for the Study of African Economies.
- Sen, Amartya. 1999. Development As Freedom. New York: Random House.
- Seshan, Ganesh, and Dean Yang. 2014. "Motivating Migrants: A Field Experiment on Financial Decision-Making in Transnational Households." *Journal of Development Economics* 108 (May): 119–27. https://doi.org/10.1016/j.jdeveco.2014.01.005.
- Shankar, Anita V, MaryAlice Onyura, and Jessica Alderman. 2015. "Agency-Based Empowerment Training Enhances Sales Capacity of Female Energy Entrepreneurs in Kenya." *Journal of Health Communication* 20 Suppl 1: 67–75. https://doi.org/10.1080/10810730.2014.1002959.
- Stark, Lindsay, Khudejha Asghar, Ilana Seff, Gary Yu, Teame Tesfay Gessesse, Leora Ward, Asham Assazenew Baysa, Amy Neiman, and Kathryn L Falb. 2018. "Preventing Violence against Refugee Adolescent Girls: Findings from a Cluster Randomised Controlled Trial in Ethiopia." *BMJ Global Health* 3 (5): e000825. https://doi.org/10.1136/bmjgh-2018-000825.
- Stark, Lindsay, Ilana Seff, Khudejha Asghar, Danielle Roth, Theresita Bakamore, Mairi MacRae, Cecile Fanton D'Andon, and Kathryn L Falb. 2018. "Building Caregivers' Emotional, Parental and Social Support Skills to Prevent Violence against Adolescent Girls: Findings from a Cluster Randomised Controlled Trial in Democratic Republic of Congo." *BMJ Global Health* 3 (5): e000824. https://doi.org/10.1136/bmjgh-2018-000824.
- Subramanyam, Malavika, Cara Ebert, Christian Bommer, Lisa Bogler, Abhijeet Kumar, Sini Varghese, Sagar Atre, and Sebastian Vollmer. 2017. "Impact of the Gram Varta Programme on Health, Nutrition and Women's Empowerment in India." International Initiative for Impact Evaluation.
- Sun, Ang, and Yaohui Zhao. 2016. "Divorce, Abortion, and the Child Sex Ratio: The Impact of Divorce Reform in China." *Journal of Development Economics* 120 (May): 53–69. https://doi.org/10.1016/j.jdeveco.2015.11.006.
- The World Bank. 2019. "Women, Business and the Law." 2019. https://wbl.worldbank.org/.
- Thorpe, Sara, Kristin VanderEnde, Courtney Peters, Lauren Bardin, and Kathryn M Yount. 2016. "The Influence of Women's Empowerment on Child Immunization Coverage in Low, Lower-Middle, and Upper-Middle Income Countries: A Systematic Review of the Literature." *Maternal and Child Health Journal* 20 (1): 172–86. https://doi.org/10.1007/s10995-015-1817-8.
- UNICEF. 2019. "Child Marriage." June 2019. https://data.unicef.org/topic/child-protection/child-marriage/.
- United Nations. 2018. "Human Development Indices And Indicators: 2018 Statistical Update." New

- York: United Nations.
- ———. 2019a. "The Sustainable Development Goals Report 2019." New York: United Nations.
- ——. 2019b. "Special Edition: Progress towards the Sustainable Development Goals." E/2019/68. Report of the Secretary-General. United Nations.
- United Nations Population Fund. 2015. "Girlhood, Not Motherhood: Preventing Adolescent Pregnancy." New York: UNFPA.
- United Nations Statistical Division. 2015. "The World's Women, 2015: Trends and Statistics." New York: United Nations.
- University of California San Diego. 2019. "Evidence-Based Measures of Empowerment for Research on Gender Equality: Measurement." EMERGE. 2019. http://emerge.ucsd.edu/measurement/.
- UN Women. 2019. "Facts and Figures: Leadership and Political Participation." 2019. https://www.unwomen.org/en/what-we-do/leadership-and-political-participation/facts-and-figures.
- Upadhyay, Ushma D, Jessica D Gipson, Mellissa Withers, Shayna Lewis, Erica J Ciaraldi, Ashley Fraser, Megan J Huchko, and Ndola Prata. 2014. "Women's Empowerment and Fertility: A Review of the Literature." *Social Science & Medicine* 115 (August): 111–20. https://doi.org/10.1016/j.socscimed.2014.06.014.
- Vaessen, Jos, Ana Rivas, Maren Duvendack, Richard Palmer Jones, Frans Leeuw, Ger van Gils, Ruslan Lukach, et al. 2014. "The Effect of Microcredit on Women's Control over Household Spending in Developing Countries: A Systematic Review and Meta-Analysis." Campbell Systematic Reviews. The Campbell Collaboration. https://doi.org/10.4073/csr.2014.8.
- Valdivia, Martín. 2015. "Business Training plus for Female Entrepreneurship? Short and Medium-Term Experimental Evidence from Peru." *Journal of Development Economics* 113 (March): 33–51. https://doi.org/10.1016/j.jdeveco.2014.10.005.
- Windt, Peter van der, Macartan Humphreys, and Raul Sanchez de la Sierra. 2018. "Gender Quotas in Development Programming: Null Results from a Field Experiment in Congo." *Journal of Development Economics* 133 (July): 326–45. https://doi.org/10.1016/j.jdeveco.2018.02.006.
- World Bank. 2015. *Women, Business and the Law 2016: Getting to Equal*. Washington, DC: World Bank. https://doi.org/10.1596/978-1-4648-0677-3.
- World Economic Forum. 2019. "Global Gender Gap Report 2020." Geneva, Switzerland: World Economic Forum.
- World Health Organization. 2017. "Violence against Women." November 29, 2017. https://www.who.int/news-room/fact-sheets/detail/violence-against-women.
- ———. 2018a. "Global Health Estimates 2016: Deaths by Cause, Age, Sex, by Country and by Region, 2000 2016." Geneva: World Health Organization.
- ———. 2018b. "Family Planning/Contraception." February 8, 2018. https://www.who.int/news-room/fact-sheets/detail/family-planning-contraception.
- World Values Survey. 2014. "World Values Survey: Round Six." Country-Pooled Datafile. Madrid: JD Systems Institute. http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp.
- Yoong, Joanne, Lila Rabinovich, and Stephanie Diepeveen. 2012. "The Impact of Economic Resource Transfers to Women versus Men A Systematic Review." London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.