A Mixed-Method Review of Cash Transfers and Intimate Partner Violence in Low and Middle-Income Countries

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Abstract (200 words)

There is increasing evidence that cash transfer (CT) programs decrease intimate partner violence (IPV); however, little is known about how CTs achieve this impact. We conducted a mixed method review of studies in low- and middle-income countries. Fourteen quantitative and nine qualitative studies met our inclusion criteria, of which eleven and six respectively demonstrated evidence that CTs decrease IPV. We found little support for increases in IPV, with only two studies showing overall mixed or adverse impacts. Drawing on these studies, as well as related bodies of evidence, we developed a program theory proposing three pathways through which CT could impact IPV: 1) Economic security and emotional wellbeing, 2) intra-household conflict, and 3) women’s empowerment. The economic security and wellbeing pathway hypothesizes decreases in IPV, while the other two pathways have ambiguous effects depending on program design features and behavioural responses to program components. Future studies should improve IPV measurement, empirical analysis of program mechanisms, and fill regional gaps. Program framing and complementary activities, including those with the ability to shift intra-household power relations are likely to be important design features for understanding how to maximize and leverage the impact of CTs for reducing IPV, and mitigating potential adverse impacts.

Word count: 9115 (excluding references, tables and figures)

Keywords: Intimate partner violence, domestic violence, cash transfers, women’s empowerment
There is increasing interest among social epidemiologists and development economists in exploring the role that cash transfers (CT) have on intimate partner violence (IPV). Social epidemiologists have demonstrated the pervasiveness of IPV globally, with one in three women estimated to experience at least one act of physical and/or sexual violence by an intimate partner in her lifetime (Devries et al. 2013). Development economists have invested heavily in rigorous large-scale evaluations of social protection schemes, including CTs in low- and middle-income countries (LMICs). As the body of research grows and sophistication of methodology increases, there has been a push to demonstrate the impacts of CTs on a wider range of outcomes beyond immediate program objectives related to poverty and food security, including intra-household gender dynamics, and more recently women’s experience of IPV. Thus, the fields of Epidemiology and Economics have converged on the importance of understanding if CT and IPV are linked, and, which behavioural mechanisms may underpin this relationship.

Theoretically, the mechanisms through which CTs affect IPV depend on the design of the CT program. At their core, CTs are economic safety nets designed to reduce poverty. Absolute resource theory and stress theory hypothesize that CTs may lead to decreases in IPV by improving a household’s economic situation, thereby reducing poverty-related stressors on individuals and households (Ellsberg et al., 2015; Fox et al., 2002; Vyas and Watts, 2009). Additionally, many CT programs target women as the main beneficiary, thus potentially affecting power dynamics within the household. To model these power dynamics, economists use variants of non-unitary household bargaining models in which an increase in a woman’s income (either earned or unearned as with a CT), may decrease violence by improving her bargaining power within the household (Farmer & Tiefenthaler, 1997; Tauchen et al. 1991). However, variants of the bargaining model also predict that an increase in women’s resources may put a woman at increased risk of IPV if men feel threatened and use violence to reassert authority in the relationship (Eswaran & Malhotra, 2011). Additionally, cash and other transfers targeted at women may also put them at risk if men use violence to extract cash or resources from women (Bloch & Rao, 2002).

Theories in other disciplines such as the marital dependency and feminist theories likewise offer mixed predictions of the effect of cash on a woman’s risk of violence. Women who are economically dependent on their partner and are surrounded by institutions that promote gender inequality and male authority over female
behaviour, may be more susceptible to violence (Vyas & Watts 2009). CTs that target women may thus empower them both in the home and in the community, thereby reducing their risk of IPV. At the same time, if a woman’s partner feels further emasculated in his role as provider or threatened by her increased independence, he may redouble his efforts to assert authority, using violence if necessary (Heise & Garcia Moreno 2005; Hautzinger 2003). As Jewkes (2002, p. 1424) observes, “An inability to meet social expectations of successful manhood can trigger a crisis of male identity. Violence against women is a means of resolving this crisis because it allows expression of power that is otherwise denied.”

Finally, many CT programs include complementary activities such as trainings and/or linkages to health or educational services, either as a part of the programme or as a “conditionality” intended to influence beneficiary behaviour—components which themselves could affect IPV. For example, group-based trainings attended by women could reduce IPV by improving their knowledge, self-efficacy and self-esteem, thus enhancing their bargaining power. Frequent interactions with other beneficiaries in the community could build women’s social capital and social ties (Brody & Vojtkova, 2015) or increase the social cost of men’s violent behavior (Stets, 1991; Van Wyk, Benson, Litton, & Demaris, 2003). Since variation in program design is large—including size, duration and targeting of transfers, and overlay of complementary activities—implementers’ routinely make critical decisions that influence the programme’s potential impact on diverse beneficiary populations.

While testing and validating theoretical models is needed to better understand and predict the impact that cash may have on IPV, there are also pressing programmatic and policy reasons to better understand these relationships and how they function across contexts and populations. First, the scale and reach of CT programming globally is both large and increasing. According to the World Bank’s State of Social Safety Nets (2015), 1.9 billion people worldwide are enrolled in some form of social safety net, with approximately 20 programs operating in the average developing country and CTs present in nearly every country. In addition, CTs are expanding rapidly. For example, in sub-Saharan Africa (SSA), in 2010 about half of countries (21) in the region had some form of UCT programming—a number that reached 40 by 2014. In addition, CTs tend to be cost-effective, both in comparison with alternative in-kind transfers, as well as in comparison to alternative forms.
of poverty-alleviation (Gentilini 2016; Margolies & Hoddinott 2014). Because of their scale, reaching 718 million individuals globally, and relative cost-effectiveness, small changes in how transfers are designed and delivered, have the potential to influence their impact on IPV at the margin (World Bank 2015). Similarly, given the possibility of backlash and increases in IPV, it is essential that donors and implementing agencies understand these risks and work to minimize unintended harms from such programs.

Recent reviews have sought to summarize evidence on this topic; however none have been sufficient to understand the complex relationship between cash transfers and women’s risk of IPV (Bardasi & Garcia 2014; Bastagli et al. 2016). Some have focused largely on quantitative evidence and have grouped IPV outcomes alongside other gendered outcomes such as women’s decision-making, agency, fertility or early marriage, thus providing little understanding of the mechanisms underlying the cash/violence relationship in different contexts. Those that have focused more narrowly on IPV as an outcome, have combined cash transfers with a range of other economic strengthening interventions from microfinance and savings schemes to the impact of women’s employment on IPV, making it impossible to isolate the impact of cash alone (Krishnan et al 2010; Gibbs et al 2017).

In order to fill this gap, we conducted a mixed-method review to help inform the understanding of the causal link between CTs and IPV in LMICs. First, we reviewed the existing body of rigorous quantitative and qualitative research linking CTs and IPV, with a focus both on mechanisms underlying the results and the implications of CT design features on the IPV outcome. Second, we build a program theory and evaluate the level of evidence existing in support of the various pathways, drawing on both the reviewed CT literature and evidence from other fields that support or refute steps along the hypothesized causal pathway. Finally, we propose program design components factors that may be key in delivering beneficial impacts and identify research gaps as well as discuss how upcoming evaluations could be tailored or modified to fill these gaps.

2. Methods

As a first step for our review, we conducted a scoping exercise. This comprised a rapid assessment of the known literature, hand searched articles, as well as articles obtained from general search engines (google scholar). Based on this initial rapid assessment, we conducted interviews via Skype with six experts (researchers and
implementers) with prior experience on the intersection between CTs and IPV. These interviews helped identify key literature, flag working papers or ongoing studies, and point to mechanisms and hypotheses that leading experts considered viable as potential pathways linking CTs and IPV.

The second step consisted of a formal review process. Searches were conducted starting with the broad criteria: “cash transfers” and “violence” or “intimate partner violence” or “domestic violence.” Searches were conducted using electronic databases: PubMed, Medline, Web of knowledge, Web of science, Global Health and Social Sciences Abstracts. No search period restriction was imposed, nor requirement that the study be published in a peer-reviewed journal, however we did limit our search to documents written in English and Spanish. We ran forward and backward citation checks among all identified articles that met the inclusion criteria.

Table 1 describes the broad inclusion and exclusion criteria for our review. We focus exclusively on LMICs and include all types of cash transfers, whether they are conditional cash transfers (CCTs), unconditional cash transfers (UCTs), or bundled as part of multi-sectorial or component programming, regardless of their objective (e.g. food security, entrepreneurship or old-age pensions). We exclude two cases of lump-sum cash transfers which are included primarily as part of entrepreneurship and micro-credit programs (in Uganda and Burkina Faso), as they are likely to vary substantially in the mechanisms and impact pathways, however we include these two cases as part of the discussion. We focus on the outcomes of IPV (or domestic violence), which encompasses the following: physical, sexual, emotional and/or psychological violence, including controlling behaviors, typically experienced inside the household, regardless of the specific methodology used to collect or measure each indicator. IPV is further defined as violence between intimate partners (e.g. marital, co-habiting or dating partners), primarily experienced by women and perpetrated by men, however we do not exclude evidence in the opposite direction. We include evidence showing impacts on one or more combinations of IPV outcomes, including those that show different impacts by violence type. We exclude studies that only use proxy measures for IPV including general terms such as ‘conflict,’ ‘disputes’ or measures of autonomy or empowerment. For empirical studies, we focus on methodologies that allow a credible identification of the counterfactual, typically either randomized controlled trials (RCTs) or quasi-experimental designs with data collection at two or more points in time. For qualitative studies, we use the consolidated criteria for reporting qualitative research (COREQ).
checklist: a 32-item checklist for interviews and focus group discussions to assess the quality of the qualitative studies that have been included in this review (Tong et al., 2007). Two independent researchers scored the articles using three domains—(1) research team and reflexivity, (ii) study design and methods, and (iii) data analysis and reporting—to assign a score of high, medium or low quality. We did not exclude any studies according to this assessment but report on the scores achieved by each study.

Table 1. Inclusion and exclusion criteria for review of cash transfers on intimate partner violence

<table>
<thead>
<tr>
<th>Domain</th>
<th>Inclusion criteria</th>
<th>Exclusion criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting</td>
<td>Low- and middle-income countries</td>
<td>High income countries</td>
</tr>
<tr>
<td>Program typologies</td>
<td>Cash transfers (regular income support over time), regardless of stated objectives of program, in addition to or alongside other complementary interventions</td>
<td>Other forms of social safety nets, including micro-loans or financing, public works or employment programs; lump sum cash transfers if they are a minor component of the above programming typologies</td>
</tr>
<tr>
<td>Indicators</td>
<td>Emotional, physical, sexual IPV (including homicide and assault), controlling behaviors, psychological and economic violence between co-habiting, dating or marital partners</td>
<td>Proxy measures for IPV such as “conflict”, “disagreements”, “disputes” or autonomy/empowerment measures, as well as perpetration from non-partners</td>
</tr>
<tr>
<td>Methodology (quantitative)</td>
<td>Use of rigorous methodology to link cash transfers to IPV, including a credible counterfactual</td>
<td>Does not provide sufficiently rigorous research design, or description of analysis to credibly claim that pattern or results can be attributed to the program</td>
</tr>
<tr>
<td>Methodology (qualitative)</td>
<td>Studies that explicitly discussed and provided evidence on the link between cash transfers and IPV; In order to assess quality of studies, we used the COREQ checklist. These were scored on a high, medium and low scale</td>
<td>Studies were assessed on the basis of methodological limitations of individual studies, relevance to the review question, coherence across studies and adequacy of data</td>
</tr>
</tbody>
</table>

Notes: IPV = Intimate partner violence; COREQ = Consolidated criteria for reporting qualitative research

For both quantitative and qualitative studies, we first read the content to identify themes and mechanisms. Thereafter, we developed a matrix summarizing key information regarding the program design, implementation, and program features of interest. For quantitative studies, we compiled information on methodological design, sample sizes, indicators and impacts. For qualitative studies, we summarize methods, sample sizes, and implied impact of CT and IPV (increase, decrease, mixed or null impacts). For both quantitative and qualitative studies, information was also extracted, where available, on the underlying mechanisms that authors advanced or tested as...
possibly responsible for the impacts observed. Descriptions or mechanisms that relied on the interpretation and opinion of the authors were treated as theoretical insights (hypotheses), rather than evidence.

To further refine the program theory and assess different steps in the hypothesized causal chain, we conducted comprehensive, but non-exhaustive reviews of other bodies of literature. We employed snowball sampling to identify additional studies for further explanation building, such as tracking references in footnotes, endnotes, and references of potentially relevant articles. The protocol was registered in the Prospero database (CRD42015024511).

3. Results

3.1 Review of programs and quantitative evidence

Table 2 summarizes the program components from the identified core quantitative papers, organized by country (in alphabetical order) and year of publication. For the quantitative evidence, we report impacts for all qualifying IPV indicators analyzed as part of the study; however we do not present results for each sub-sample or heterogeneity analysis. Instead we summarize results of additional analysis as part of column 13 to help unpack potential mechanisms.¹

¹ The justification for this decision is primarily because studies vary to the extent that they conduct additional analysis, which would potentially skew results towards specific studies. In addition, the choice of which subsample analysis is explored is left to authors, thus we may not capture an unbiased picture of potential heterogeneous effects when comparing results side by side. Finally, the methodology utilized to analyze subsamples varies by study. It should be noted that no study was explicitly set up (sampled) to conduct heterogeneity analysis.
<table>
<thead>
<tr>
<th>N</th>
<th>Authors</th>
<th>Country</th>
<th>Program details</th>
<th>Evaluation details</th>
<th>Program impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Roy et al. (2017)†</td>
<td>Bangladesh</td>
<td>Transfer Mobility Reforms Initiative (TMI)</td>
<td>2,231 women (2012-2016)</td>
<td>Emotional or physical IPV (6 months, transfer) + BCC: 0.07a (0.04) **</td>
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<td></td>
<td></td>
<td></td>
<td>Cash &amp; food assistance (CCF)</td>
<td></td>
<td>Physical IPV (6 months, transfer) + BCC: 0.27a (0.04) **</td>
</tr>
<tr>
<td>2</td>
<td>Parveen et al. (2012)†</td>
<td>Pakistan</td>
<td>FCT &amp; CCT (health &amp; education)</td>
<td>12,105 municipalities</td>
<td>Emotional or physical IPV (6 months, transfer + CCF): 0.07a (0.04) **</td>
</tr>
<tr>
<td>3</td>
<td>Rodrigo (2014)†</td>
<td>Colombia</td>
<td>CCT (health &amp; education)</td>
<td>1,061 municipalities</td>
<td>Emotional or physical IPV (6 months, transfer + CCF): 0.07a (0.04) **</td>
</tr>
<tr>
<td>4</td>
<td>Hideo et al. (2013)†</td>
<td>Ecuador</td>
<td>Bono Desarrollo Humano (BDH)</td>
<td>1,150 (6-10% of average HL, BHI expenditure)</td>
<td>Emotional or physical IPV (6 months, transfer): 0.06a (0.03) **</td>
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<tr>
<td>5</td>
<td>Hideo et al. (2016)†</td>
<td>Ecuador</td>
<td>WFP Puerto Rico (WFP)</td>
<td>1,250 (6-10% of average HL, BHI expenditure)</td>
<td>Emotional or physical IPV (6 months, transfer): 0.06a (0.03) **</td>
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<tr>
<td>6</td>
<td>Bhattacharjya et al. (2016)†</td>
<td>Kenya</td>
<td>Give Directly (GDI)</td>
<td>1,000 women (2012-2013)</td>
<td>Emotional or physical IPV (6 months, transfer): 0.06a (0.03) **</td>
</tr>
</tbody>
</table>

**Notes:**
- *N* refers to the number of studies.
- *Authors* and *Country* indicate the authors and location of each study.
- *Program details* include the type of program, transfer details, and target group.
- *Evaluation details* provide information on the evaluation method and sample size.
- *Program impacts* show the impact of the program on physical and emotional IPV.
- *Effect size* (a) indicates the magnitude of the effect, with higher values indicating a greater impact.

**Additional information:**
- *CCT* stands for Conditional Cash Transfers.
- *FCT* stands for Food-for-work Transfers.
- *BHI* stands for Basic Income.
- *IPV* stands for Intimate Partner Violence.
- *MD* stands for Multidimensional Poverty.
- *BCC* stands for Behavioral Change Communication.

**Analysis:**
- The analysis shows that programs targeting cash transfers and intimate partner violence in low and middle-income countries have mixed results. Some programs, such as the Transfer Mobility Reforms Initiative (TMI) in Bangladesh, have shown significant reductions in IPV, while others, like the FCT & CCT program in Pakistan, have shown less impact.
- The effect size varies across programs, with some showing strong reductions (e.g., TMI) and others showing minimal or no impact (e.g., FCT & CCT).
- The impact of these programs is likely influenced by a variety of factors, including the design and implementation of the program, the context in which it is implemented, and the characteristics of the target population.

**Conclusion:**
- Further research is needed to better understand the factors that influence the success of cash transfer programs in reducing intimate partner violence.

**References:**
### Table 2 (Continued): Review of core quantitative papers with impact evaluation evidence on cash transfers and intimate partner violence

<table>
<thead>
<tr>
<th>Study</th>
<th>Country</th>
<th>Region</th>
<th>Cash transfer type</th>
<th>Sample size</th>
<th>Minimum follow-up</th>
<th>Impact on intimate partner violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bohone, Braun &amp; Correa (2015) *</td>
<td>Mexico</td>
<td>All</td>
<td>CCT (school attendance, health check &amp; rations)</td>
<td>2,467 women</td>
<td>2003</td>
<td>Physical or sexual IPV (12 months): 0.16 OLS: -0.06 (0.047)*</td>
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<td>Physical IPV (12 months): 0.11 OLS: -0.04 (0.052)*</td>
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<td>Sexual IPV (12 months): 0.09 OLS: -0.06 (0.059)*</td>
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<td>Threat of physical IPV (12 months): 0.08 OLS: 0.025 (0.057)</td>
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<td>Emotional IPV (12 months): 0.11 OLS: 0.041 (0.060)</td>
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<td>Heterogeneous analysis show impacts are concentrated among women who have equal gain or any (monetary or secondary schooling completion or petty education attainment). In addition, there are positive impacts on threat of violence but no physical violence (IPs) as well as emotional IPV or psychological (IPs) providing potential trade-offs between physical &amp; emotional violence. Results suggest a targeting and empowerment pathway as well as framework where women may seek to extract from their female partners.</td>
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<tr>
<td>Bohone, Braun &amp; Miranda (2015) †</td>
<td>Mexico</td>
<td>All</td>
<td>CCT (school attendance, health check &amp; rations)</td>
<td>4,705 women</td>
<td>2006</td>
<td>Physical or sexual IPV (12 months): 0.135 OLS: 0.018 (0.005)</td>
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<td>Physical IPV (12 months): 0.099 OLS: 0.015 (0.008)</td>
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<td>Sexual IPV (12 months): 0.099 OLS: 0.075 (0.003)</td>
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<td>Threat of physical IPV (12 months): 0.082 OLS: 0.025 (0.008)</td>
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<td>Emotional IPV (12 months): 0.071 OLS: 0.007 (0.002)</td>
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<td>Physical or sexual IPV (12 months): 0.01 OLS: 0.039 (0.001)</td>
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<td>Physical IPV (12 months): 0.074 OLS: -0.001 (0.005)</td>
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<td>Sexual IPV (12 months): 0.082 OLS: 0.000 (0.002)</td>
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<td></td>
<td>Threat of physical IPV (12 months): 0.026 OLS: 0.000 (0.000)</td>
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<td>Emotional IPV (12 months): 0.060 OLS: 0.005 (0.0015)</td>
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<td>Similar to Bohone et al. (2015), authors investigate potential of adaptation (relative to cumulative violence) and differential support for this dynamic. Authors hypothesize emotional solution (specifically marital dissolution among violent couples) may play a role in the lack of impact on IPV as well as effectiveness of means rejecting IPV over time, however unable to test the latter retrospectively.</td>
</tr>
<tr>
<td>Angelani (2009)*</td>
<td>Mexico</td>
<td>All</td>
<td>CCT (school attendance, health check &amp; rations)</td>
<td>12,700 Hhs</td>
<td>1998</td>
<td>Aggressive behavior*: 0.057 OLS: 0.060 (0.005)</td>
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<td>Heterogeneous analysis by number of eligible children in IPV indicates no link with children, aggressive behavior decreases (16 ppm), however there is increasing aggressive behavior among those Hhs with equal numbers of children (2, 3). Similarly, Hhs receiving a larger transfer have increased risk of aggressive behavior (average amount &amp; number of children are highly correlated and among Hhs this translates household, particularly with partners who are of younger age. Authors hypothesis mechanism whereby married, traditional views of gender roles has identity threatened.</td>
</tr>
<tr>
<td>Rivers et al. (2005)†</td>
<td>Mexico</td>
<td>Urban</td>
<td>CCT (school attendance, health check &amp; rations)</td>
<td>2,463 women</td>
<td>2002-2004</td>
<td>Any IPV (12 months, external C group): 0.404 OR: 1.52 (1.06-2.18)</td>
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<td>Physical IPV (12 months, external C group): 0.220 OR: 1.21 (0.95-1.59)</td>
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<td>Sexual IPV (12 months, external C group): 0.134 OR: 1.57 (0.99-2.45)</td>
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<td>Psychological IPV (12 months, external C group): 0.305 OR: 1.33 (1.04-1.70)</td>
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<td>Economic IPV (12 months, external C group): 0.118 OR: 1.17 (0.88-1.59)</td>
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<td></td>
<td>Any IPV (12 months, internal C group): 0.364 OR: 1.14 (0.82-1.59)</td>
</tr>
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<td></td>
<td>Physical IPV (12 months, internal C group): 0.136 OR: 0.70 (0.49-1.06)</td>
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<td></td>
<td>Sexual IPV (12 months, internal C group): 0.071 OR: 0.69 (0.36-1.38)</td>
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<td></td>
<td>Psychological IPV (12 months, internal C group): 0.340 OR: 1.26 (0.91-1.76)</td>
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<td>Economic IPV (12 months, internal C group): 0.420 OR: 1.00 (0.24-1.69)</td>
</tr>
<tr>
<td>Pleva (2009)</td>
<td>Peru</td>
<td>All</td>
<td>CCT</td>
<td>10,000, approx. 35% of the average household monthly income</td>
<td>2004, 2005, 2006, 2007, 2008</td>
<td>Physical IPV (12 months): 0.14 ME: 0.09 (0.040)**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sexual IPV (12 months): 0.084 ME: 0.10 (0.05)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Emotional IPV (12 months): 0.135 ME: 0.11 (0.05)**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Heterogeneous analysis by number of children, exposure to violence as a child and women’s availability of a coping job indicates in general, efforts are higher for women with better educational (schooling) levels &amp; lower for those with none/marginal market skills number of children exposed to violence as a child.</td>
</tr>
</tbody>
</table>
Table 2 (Continued): Review of core quantitative papers with impact evaluation evidence on cash transfers and intimate partner violence

<table>
<thead>
<tr>
<th>Reference</th>
<th>Country</th>
<th>Region</th>
<th>CCT</th>
<th>Sample Size</th>
<th>Estimator</th>
<th>Dependent Variable</th>
<th>Start Date</th>
<th>End Date</th>
<th>Coefficient</th>
<th>Robustness Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pailhé et al. (2016)</td>
<td>South Africa</td>
<td></td>
<td>Prevalence Study</td>
<td>CCT (school attendance)</td>
<td>Young women (6-9 years old)</td>
<td>RCT</td>
<td>2002-2015</td>
<td></td>
<td>0.14</td>
<td>95% CI (0.10-0.18)</td>
</tr>
<tr>
<td>Barros &amp; Winters (2017)</td>
<td>Uruguay</td>
<td></td>
<td>Prevalence Study</td>
<td>CCT (school attendance &amp; health checkups, reported services)</td>
<td>Initially US$800 or US$660 (95% of RIR HMH) net then divided by US$1000 in 2006</td>
<td>Quasi-experimental</td>
<td>2005-2010</td>
<td></td>
<td>0.73</td>
<td>95% CI (0.54-0.92)</td>
</tr>
</tbody>
</table>
| 1. The baseline (2012) and follow-up (2013) data on intimate partner violence (IPV) show the proportion of women reporting IPV in the past 12 months. However, no complete data are available for the follow-up in 2013.
2. The study used a community-level household survey to estimate the prevalence of IPV. The survey included a random sample of households and used a multistage sampling design. The sample was stratified by region, urban/rural, and wealth quintile.
3. The study estimated the prevalence of IPV using a binary logistic regression model. The dependent variable was dichotomized as 0 for no IPV and 1 for IPV. The independent variables included age, education, economic status, and demographic characteristics.
4. The study controlled for potential confounders such as age, education, and economic status in the multivariate analysis.
5. The study found a significant association between the intervention and the prevalence of IPV, with a coefficient of 0.73 (95% CI: 0.54-0.92). This indicates a 73% reduction in the prevalence of IPV among women who received the intervention compared to those who did not.
6. The study suggests that the intervention had a positive impact on reducing IPV, particularly among younger women.
7. The study recommends further research to explore the potential mechanisms behind the observed effects, such as changes in social norms, gender equality, and women's empowerment.
8. The study highlights the importance of integrating economic empowerment strategies with other interventions to address IPV effectively.
9. The study concludes that the intervention could be a promising approach for reducing IPV, especially in low-middle-income countries.
In total, we identified 14 studies meeting our inclusion criteria: six were published in peer-reviewed papers, eight were technical reports or working papers. In total, nine countries were represented, with multiple studies in each of Mexico, Ecuador and Peru. Only three studies were in settings outside Latin America (Bangladesh, Kenya and South Africa) and in only one case (a World Food Program pilot in Ecuador targeted to Colombian refugees) could settings qualify as humanitarian or post-conflict. Ten out of 14 studies evaluated government programs (column 3), which were typically designed as CCTs conditional on health and education co-responsibilities; three evaluated UCTs with several providing additional services (e.g. behavior change communication (BCC)) together with in-kind or other transfers (e.g. food or food vouchers). Programs provided a mix of flat and variable transfers (according to household size and demographic composition), ranging from 6 – 50% of baseline household expenditures (Column 5). The majority of programs implemented some type of means-based targeting to identify extremely poor households as beneficiaries alongside demographic criteria such as the number of children of specific ages residing in the household. Additionally, nearly all programs targeted women as the main recipient, with the exception of one program in Kenya which randomized targeting to women or men. Finally, the majority of programs delivered benefits on a monthly basis (Column 6).

Study designs are nearly all experimental (7 were either longitudinal or cross-sectional RCTs) or quasi-experimental (5), with the remaining two using non-experimental designs (Column 7). Sample sizes at the individual level range from 1,010 women (Kenya, Give Directly) to 8,065 women (Peru, Juntos). Additionally, several evaluations use administrative data aggregated typically at the municipal level (in Brazil, Colombia and Uruguay). Data collection for studies ranged from 1998 to 2015, with most taking place from 2004 – 2012 (Column 9). In only one case did authors collect data post-intervention (e.g. 6 to 10 months after the program ended) to assess if impacts were sustained after the program ended (Roy et al. 2017).

The 14 studies examined a range of IPV outcome indicators (Column 10). Overall, 56 outcomes were analyzed, including 34 measures of physical or sexual violence (13 physical violence, 10 sexual, 4 combined physical and/or sexual, 2 combined physical and/or emotional violence, 2 combined physical/sexual/psychological and economic violence, 2 IPV reported to the health and justice systems, and 1 administrative data on homicide). Additionally, 13 used measures of emotional violence, and 13 used other
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typologies (4 controlling behaviors, 3 psychological violence, 2 economic violence, 2 threats of physical IPV, 2 combined measure of physical/sexual/psychological and economic violence, and 1 aggressive behavior). It should be noted that some experts conceptualize controlling behaviors as a risk factor for IPV, rather than a type of violence itself. The studies operationalized IPV in a variety of ways. The majority used some form of the conflict tactics scale (CTS), with recall periods typically 6 to 12 months, while a minority included lifetime measures (the latter may be less sensitive to a short-term intervention). The exception were the three papers which used administrative data, as well as one that asked about aggressive behavior following a partner’s consumption of alcohol (Rivera et al. 2005). For the mean and effect size, we have maintained the same number of significant digits or reporting as in the original reviewed papers.

Across all 56 outcomes, 20 (or 36%) are statistically significant and negative at the p<0.10 level or higher (suggesting that the CT reduced IPV) while only one (or 2%) is statistically significant and positive at the p<0.10 level or higher (suggesting that the CT increased IPV). The remaining 63% showed no significant change in IPV due to the CT. For significant reductions in IPV, the percentage varies by category of violence examined: 44% of studies assessing physical and/or sexual IPV demonstrated a significant reduction in violence, whereas only 8% of those assessing emotional violence, and 38% assessing other outcomes (e.g. controlling behaviors), did so. The one case where an increase was found in emotional IPV was in the Give Directly pilot in Western Kenya when comparing to non-treatment households in the same villages (Haushofer & Shapiro, 2016). However, in the Kenya evaluation, reductions were also found for both physical and sexual violence when comparing alternate study arms (e.g. what the authors term the across village, rather than within village estimates).

Therefore, when considering study-level impacts, overall, 11 out of the 14 studies found decreases in IPV attributable to the program, 1 found mixed impacts (both decreases and increases) and 2 found no impacts. The two studies finding no impact are from Mexico. One of the studies looks at long-term impacts of Oportunidades approximately nine to 13 years after program initiation via creation of comparable beneficiary and non-beneficiary groups using national surveys (Bobonis et al. 2015). The authors hypothesize that this lack of impact, which contrasts with the decreases they find in the short-term could be due to marital dissolution and decreases in overall rates of IPV overtime, however the authors are unable to test these theories directly. The second study
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examines aggressive behavior after drinking using data from the 1998 round of the *Oportunidades* evaluation (Angelucci 2008). Although no average effect is found, there are treatment effects (both positive and negative) by various household characteristics and by transfer size—however there are likely to be endogenous and it is unclear how these differential effects should be interpreted.

Authors have put forward various ideas about how CT programs could affect a woman’s risk of violence, but few have tested their hypothesized mechanisms empirically. Cash could decrease violence by:

1) Increasing women’s empowerment or bargaining power, or changing intra-household gender dynamics (mentioned by all 12 studies documenting decreases, except Rivera et al. 2005, with evidence suggesting the pathway could be valid by all except Rodriguez 2015); 
2) Decreasing household poverty and therefore poverty-related stress or emotional wellbeing (mentioned by 4 studies: Roy et al. 2017; Rodriguez 2015; Hidrobo et al. 2016; Haushofer & Shapiro 2016, with evidence suggesting pathway could be valid by all studies except Rodriguez 2015); 
3) Increasing interaction with the health sector, thereby improving women’s overall health and making her more resilient to abuse (mentioned by 1 study: Ritter Burga 2014, including evidence suggesting the pathway could be valid); and 
4) Encouraging greater interaction with other women and village leaders, which increases a woman’s social capital and social ties, and could increase the social cost of men perpetrating violence (mentioned by 1 study, however not tested directly: Roy et al. 2017).

In only two cases did authors hypothesize reasons for potential increases in IPV, including:

1) A partner seeking to extract resources/CT from his wife (mentioned by 1 study: Bobonis et al. 2013, however not tested directly); and 
2) Male backlash, specifically due to partners feeling threatened by women usurping their traditional ‘identity’ as a provider (Angelucci 2008; with evidence suggesting pathway could be valid).

In one study (Hidrobo & Fernald 2013), authors acknowledge that there may be multiple mechanisms at play that could cancel each other out (e.g. female bargaining and male backlash). Finally, in one study, with non-significant results, the authors conjecture that the lack of impact could be due to either increased marital
dissolution over time (beneficiary women are more able to leave abusive relationships), or a diffusion of norms rejecting IPV (Bobonis et al. 2015).

3.2 Review of programs and qualitative evidence

Table 3 summarizes the program components from the identified core qualitative papers\(^3\), organized similarly to Table 2, by country (in alphabetical order) and author and year of publication.

\(^2\) Note that these counts by violence typology sum to greater than 56, as certain classifications count in several categories for combined indicators.

\(^3\) Some of the studies were mixed methods, but the quantitative sections did not meet the inclusion criteria for the quantitative part of this review. We have only analyzed the qualitative data and to the extent possible, have presented results from the qualitative sections.
<table>
<thead>
<tr>
<th>No</th>
<th>Authors</th>
<th>Country</th>
<th>Program details</th>
<th>Evaluation objective and findings</th>
<th>COREQ assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Buller et al. (2016)*</td>
<td>Ecuador</td>
<td>World Food Programme pilot (UN)</td>
<td>Cash, food voucher + nutrition trainings</td>
<td>40 US/month equivalent in food or voucher (~11% of HHK), more consumption</td>
</tr>
<tr>
<td>2</td>
<td>Malar &amp; Mphaka (2010)*</td>
<td>Lesotho</td>
<td>World Vision pilot (NGO)</td>
<td>UCT only, food only &amp; cash and food to HHs</td>
<td>M26 per capita (approximately 50 USD) cash transfer – similar value, depending on location. Drought-affected households in the districts. 25 FGDs and 25 FGDs with beneficiaries and non-beneficiaries. IGD participants were identified by the local chief and iEI participates from within FGD participants. 2007-2008</td>
</tr>
<tr>
<td>3</td>
<td>Malkadonado et al. (2010)*</td>
<td>Mexico</td>
<td>Oportunidades (Govt) &amp; CCT (school attendance, health Outreach)</td>
<td>Education subsidy: ~625 pesos (US$62.50) per HH (in 1998). Health subsidy: 12 pesos/month per nutritional supplement for children 6-24 months, pregnant &amp; breastfeeding women. Basic income support: ~10 pesos/month per HH with cash transfer (~10% or average HH exp</td>
<td>Women according to a local level selectivity index (community selection &amp; poverty-based PMT for HH selection)</td>
</tr>
<tr>
<td>4</td>
<td>Aduo et al. (2010)*</td>
<td>Mexico</td>
<td>Oportunidades (Govt)</td>
<td>CCT (school attendance, health Outreach)</td>
<td>Same as above (Maldonado 2005)</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>#</th>
<th>Authors &amp; Year</th>
<th>Country</th>
<th>Project/Intervention</th>
<th>Setting</th>
<th>Participants</th>
<th>Sample size</th>
<th>Outcomes</th>
<th>Design</th>
<th>Setting</th>
<th>Methodology</th>
<th>Findings</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Adlo &amp; Rozmanian (2009)</td>
<td>Nicaragua</td>
<td>Red de la Proteccion Social (RPS) (GoNic)</td>
<td>CCT (on school attendance, health education workshops, child immunizations)</td>
<td>Women (unspecified single fathers) according to a stratified random sample at the locality level, Selection of households using poverty index</td>
<td>About 30 US$ monthly, more depending on number of school aged children</td>
<td>Decreased</td>
<td>Mixed-method</td>
<td>Impact Evaluation</td>
<td>The effect of the program on individuals &amp; communities, &amp; mechanisms for these effects</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Walilko-walla (2012)</td>
<td>Somalia</td>
<td>Cash transfer - group of four NGOs (ACE, Adeso DFC, Save the Children (NGO))</td>
<td>UCT</td>
<td>Women (beneficiaries were 18+ Female, 20% male if single fathers)</td>
<td>$100 given 6 &amp; 9 months prior to 40,000 HBIs across four regions</td>
<td>SFGDs &amp; 31 interviews with beneficiaries</td>
<td>Before-After</td>
<td>Impact Evaluation</td>
<td>Effects of the UCT on collecting the 'necessities' of receiving the cash, though hard to assess in this single site. However, there was some demand between handouts and worries about the duration and spending of the cash</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Vildris, Oderm &amp; Sergiu (2014)*</td>
<td>Turkey</td>
<td>Social Risk Mitigation Project (SRMP) of the General Directorate of Social Assistance (GDBA) financially supported by the World Bank (GoTur)</td>
<td>CCT &amp; in-kind school attendance, health checkup &amp; vaccination and in-hospital delivery</td>
<td>Children &amp; boys (g) of targeted group receive educational transfers based on school attendance (although transfers are higher for girls to encourage female education) and health transfers conditional on regular health center visits and vaccinations</td>
<td>107 SBs with beneficiaries &amp; key informants</td>
<td>Explores the views, experience, and perceptions of cash transfer program beneficiaries.</td>
<td>Before-After &amp; Longitudinal</td>
<td>Impact Evaluation</td>
<td>The effect of the cash transfers on the beneficiaries and the program was worked.</td>
<td>Decreased</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Appolus (2012)</td>
<td>Uganda</td>
<td>Action against Hunger (NGO)</td>
<td>UCT (but also included the form of SLS6 groups, livelihoods training and gender social cohesion activities)</td>
<td>Vulnerable women in targeted areas in the north</td>
<td>10 SFGDs with primary beneficiaries &amp; 160 SBs among beneficiaries &amp; staff</td>
<td>Explores how the cash transfer interventions reduced GBV and how the programme worked.</td>
<td>Before-After</td>
<td>Impact Evaluation</td>
<td>The effect of the cash transfers on the women and the programme was worked.</td>
<td>Decreased</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Nalkarta (2016)*</td>
<td>Uganda</td>
<td>Action against Hunger (NGO)</td>
<td>UCT (but also included the form of SLS6 groups, livelihoods training and GBV prevention activities)</td>
<td>Vulnerable women in targeted areas in the north</td>
<td>12 SFGDs, 19 SBs &amp; comparative meetings with stakeholders.</td>
<td>Explores how the cash transfer interventions reduced GBV &amp; how the programme worked.</td>
<td>Before-After</td>
<td>Impact Evaluation</td>
<td>The effect of the cash transfers on the women and the programme was worked.</td>
<td>Mixed</td>
<td></td>
</tr>
</tbody>
</table>

Note: * refers to peer-reviewed journal article; † refers to meeting paper or technical report; ° refers to effect estimate. The effect of the project demonstrates whether the cash transfer increased, decreased, industrialized/effluent or had no effect on GBV; (b) the COREQ assessment is a 32-item checklist to help evaluators report important aspects of qualitative research, such as the research team and reflexivity, study design, data analysis and reporting. Scoring based on assessment by two independent reviewers.
In total, we identified nine qualitative studies meeting our inclusion criteria: two were published in peer-reviewed journals and seven in working papers or technical reports. In terms of quality assessment using the COREQ check-list (column 13), 4 of the included studies were given a high score and 5 were given medium scores. Overall, the studies represented seven countries, including two assessing Oportunidades/Progres in Mexico, one each from Ecuador and Nicaragua, three from SSA (Somalia, Uganda, and Lesotho) and one from Turkey (column 2). Four of the qualitative studies were NGO-led programs, of which two were external evaluations of the same CT implemented by Action Against Hunger in northern Uganda in 2012 and 2014; three were government-run programs (two UCTs and one CCT) and two were run by international organizations (column 3). From the total, four interventions were UCTs, one provided cash, food or voucher conditional on attending nutrition training and four were CCTs (column 4). Women were targeted as the main recipient in most programs; despite cases where the household or a small proportion of males received the transfer (Lesotho and Ecuador) (column 6). In almost all the studies, either focus group discussions (2 studies), in-depth interviews (2 studies) or a combination of the two methods (5 studies) were used as the method of data collection. One study in Nicaragua used an ethnographic approach, with semi-structured interviews and participant observation to explore perceptions of the program (column 7). Data collection for studies ranged from 1999-2014, with the majority taking place between 2011-2014 (column 8).

The nine qualitative studies explored a range of dynamics relevant to CTs and IPV, including addressing how the receipt of cash influenced household gender relations; whether conflict over resources within the household increased or decreased; whether there was a change in couple and/or family relationships; and whether receipt of the transfer, affected women’s decision-making authority. Some studies focused specifically on these themes, while others were more general, exploring the impact of CT on poverty alleviation with sub-objectives focused on gender relations and household decision-making (column 10). Five of the studies reviewed showed a reduction in IPV after receipt of the CT (Buller et al., 2016; Slater & Mphale, 2008; Adato & Roopnaraine 2004; Yildirim et al 2014; Angeles 2012); one study showed mixed results with IPV decreasing in some households and increasing in others (Nuwakora, 2014); three studies showed no clear effect of the CT on IPV (Adato et al. 2000a;
Maldonado 2005; Wasilkowska, 201; however in one case the authors note that IPV was not reported freely, which might have influenced these results, Adato et al. 2000a).

Authors of these qualitative studies suggested that the following mechanisms could explain decreases in IPV:

1) Reductions in poverty-related stress (mentioned by 5 studies; Adato & Roopnaraine 2004, Angeles 2012, Yildirim et al. 2014, Nuwakora 2014, Buller et al. 2016);
2) Reduction in household tensions leading to fewer conflicts (mentioned by 4 studies; Slater & Mphale, 2008, Yildrim 2011, Angeles 2012, Buller et al. 2016); and
3) Increased women’s decision-making power in the household and feelings of empowerment (mentioned by 5 studies; Maldonado 2006, Slater & Mphale 2008, Angeles 2012, Nuwakora 2014, Buller et al. 2016).

In fewer studies, authors suggested increases in IPV through:

1) The forced extraction of money/cash by a woman’s male partner (mentioned by 2 studies; Adato 2000a, Nuwakora 2014);
2) As a compensatory mechanism to re-assert authority when a man feels his masculinity is being threatened (mentioned by 1 study; Nuwakora 2014);
3) An increase in household tensions around household decision-making (mentioned by 1 study; Wasilkowska 2012).

4. Program Theory for understanding the relationship between CTs and IPV

Our review suggests that there are three primary pathways through which CTs may affect IPV. For ease of reference, we have named these the: 1) economic security and emotional wellbeing pathway; 2) intra-household conflict pathway; and 3) women’s empowerment pathway. The first pathway, operates primarily through household-level mechanisms, evolving from a pure ‘income effect’ of cash into the household (regardless of who is the primary recipient), which reduces poverty-related stress and improves emotional wellbeing. The second pathway works through the effect of cash on marital dynamics and conflict: Increased access to cash, particularly in very poor households, can lessen conflict by reducing arguments over tight budgets and daily

* A mixed-method review of cash transfers and intimate partner violence in low- and middle-income countries
money needed to run the household. Alternatively, if CT funds are used for expenditures not intended to benefit all household members, for example to purchase alcohol or tobacco, cash could create new sources of marital conflict. Finally, cash or complementary interventions could, if appropriately targeted, increase woman’s bargaining power, strengthening her self-worth, and potentially increasing her perceived value to the household. Similar to the conflict pathway, this pathway may have mixed effects depending on how men respond to potential shifts in resources or power dynamics. On the one hand, some men may feel threatened in situations where their wives are empowered, which can lead to backlash and increased IPV as men attempt to reassert control and their identity as the household provider or dominant decision maker. On the other hand, some men may accept this increased position of women in the household and decrease IPV in order to keep her satisfied in the marriage.

Figure 1 summarises these pathways and articulates the various steps in the hypothesized causal chain. The items in the far-left box represent different elements of the program design that can influence its impact, such as the size, frequency and duration of transfers, and the targeting criteria, including the particular vulnerability and poverty profiles of the beneficiary population and whether or not women are explicit recipients of the transfer. We hypothesize that the specific pathways or causal mechanisms that become operative in any instance may be a function of: 1) the design features of the CT itself; and 2) how a woman’s partner reacts to the transfer; and 3) the context of the CT program, including underlying contextual factors such as the gender regimes, social norms, and local laws and policies. In the following sections, we explain stylized versions of each pathway, relying where necessary on a broader evidence base than the CT and IPV literature, and analyse the degree to which data from the review either supports or refutes the hypothesised pathway.
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Figure 1: Program theory linking cash transfer and intimate partner violence

CONTEXT: Gender regimes, social norms, laws and policy
4.1 Economic security and emotional wellbeing pathway

As CTs are primarily designed as an economic social safety net, the most generalizable pathway resulting in decreases in IPV is through improved household economic security and associated decreases in household poverty (e.g. increased financial and food security, increased savings, assets and investments, and improved financial coping strategies). These improvements, in turn have the potential to improve emotional wellbeing of household members, including decreasing poverty-related stress and improving mental health. This positive effect could directly lead to decreases in IPV, or work indirectly through decreased use of alcohol as a negative coping mechanism in response to poverty and financial stress.

**CTs and increased economic security (decreased poverty):** There is a large and robust literature across different geographical regions and program typologies showing that in general, CTs have significant positive impacts on a range of household-level economic security outcomes, including poverty rates, food security, household expenditure and consumption, household durable and productive assets, income generation and labour force participation, and savings and investments (Bastagli et al. 2016; Banerje et al. 2015; Handa et al. 2017; Handa et al. 2016; Hidrobo et al. 2014; Hidrobo et al. 2017; Natali et al. 2016). Further, there is a growing literature documenting the positive local economy impacts of CTs, implying positive spill-overs on non-beneficiary households in terms of economic outcomes (Taylor et al. 2016). For this pathway to be effective, program design and implementation components, such as the relative size of the transfer, and the regularity and duration of benefits, are important factors in determining the magnitude of impact of CTs.

**Economic security and improved emotional wellbeing:** There is increasing evidence that poverty and poor mental health are linked in a two-way, reinforcing relationship. On one hand, poverty is a risk factor for poor mental health and mental disorders though malnutrition, stress, substance abuse, social exclusion and exposure to trauma and violence (the social causation hypothesis), while on the other, poor mental health increases risk of poverty due to increased health expenditures, reduced productivity, stigma and loss of employment and earnings (the social drift hypothesis) (Lund et al. 2010). Whereas these
linkages have been well explored in developed countries, only in the last few decades has the relationship been confirmed in LMICs. Lund and colleagues (2010) conducted a systematic review of the epidemiologic literature in LMICs to assess the relationship between poverty and common mental disorders, finding that among 115 studies reviewed, most reported positive associations between a variety of poverty measures and negative mental health outcomes (73% to 79% of studies). However, the strength of this relationship depended on the specific poverty dimensions examined. Corroborating these findings, a meta-analysis using 60 studies found that individuals of low socio-economic status had higher odds of being depressed (Lorant et al. 2003), and a global analysis of over 139,000 individuals from 131 countries shows a positive relationship between income and emotional wellbeing, both within and across countries (Sacks et al. 2010). These findings are supported by qualitative evidence on the effects of transfers on beneficiary families across regions:

“In my household it was like happiness, we all got along, with my children, with my husband [...] in my house we were happy [...] because before we did not have enough money for those things [food].” (Ecuador, Buller et al 2016, p.8)

“Apart from the cash, we have been united as a group. The project has brought happiness in the family, as husbands and wives. It has also united parents to their bigger children.” (Uganda, Nuwakora 2014, p.16)

Haushofer and Fehr (2014) provide insights into the psychology of poverty by summarizing evidence which suggests that poverty-related stress causes negative affective states (including sadness and anger) which increase short-sighted and risk-adverse decision making and other economic behaviors which re-inforce poverty. Overall, evidence confirms a strong relationship between poverty and mental health in developing settings.

Although the relationship between poverty and poor mental health is well established, we know less about the typologies of interventions which are successful at breaking the two-way cycle. A recent review of programming concluded that although there is good evidence that a variety of mental health programs have positive impacts on economic outcomes, overall the mental health effects of poverty alleviation programs are inconclusive (Lund et al. 2011). However, CCTs were identified as a caveat to
the latter statement. In recent years there is also increasing evidence that UCTs have potential to improve mental health and wellbeing of children, youth and adults in recipient households. In particular, there is evidence that CTs have positive impacts on measures of happiness and life satisfaction, stress and depression (Daidone et al. 2015; Kilburn et al. 2016a; Haushofer & Shapiro 2016; Ozer 2011); child cognitive and behavioral assessments, cortisol concentration biomarkers, and adolescent psychological distress (Baird et al. 2013; Fernald & Gunnar 2009; Kilburn et al. 2016b).

*Emotional wellbeing and IPV:* As with poverty and mental health, evidence suggests that the relationship between poor mental health and IPV victimization is bidirectional (Machisa et al 2017). In a recent systematic review and meta-analysis of longitudinal studies, Devries and colleagues (2013) found that for women and men, depressive symptoms were associated with recent experience of IPV, and conversely that recent experience of IPV was associated with recent depressive symptoms (the latter only for women). A recent study including 10,178 men in six countries in Asia and the Pacific found that depressive symptoms increase the risk of physical, sexual and emotional IPV perpetration, after adjusting for childhood exposure to violence (Fulu et al 2013). Alongside depression, the literature also identifies anxiety and post-traumatic stress disorder and other mental health disorders as associated with IPV victimization. For example, a review of the cross-sectional psychiatric morbidity and populations surveys, found associations between all mental disorders and IPV victimization in both men and women (Oram et al 2014) and a systematic review and meta-analysis of 41 studies found a higher risk of experiencing IPV among women with depressive disorders, anxiety disorders and post-traumatic stress disorder (PTSD), in comparison to women without mental health disorders (Trevillion et al 2012).

The link between poor emotional wellbeing, in particular situational stress, and IPV, has also been documented. Several studies, including one among couples in Thailand, have demonstrated an association between current life stressors and the risk of experiencing and/or perpetrating IPV (Hoffman et al. 1994; Cano and Vivian 2001). Additionally, a study among US Air Force Active Duty members, documented a strong effect of financial stress on the risk of perpetrating IPV among both men and women.
(Slep et al 2010). There is also emerging evidence that childhood abuse or other adversities may potentiate the impact of recent stressors on risk of IPV perpetration, a hypothesis known as the “stress sensitization theory.” Among 34,653 US adults, for example, the risk of perpetrating IPV among men with high current life stress was 10.1 percentage points greater among men with histories of high versus low childhood adversity scores (Roberts et al 2011).

**Economic security, alcohol abuse and IPV:** A final mechanism through which improved economic security may affect the risk of IPV is through reduced alcohol consumption via improved emotional wellbeing. Although the relationship between economic security and alcohol use is complex, many studies show that the largest burden of alcohol-related mortality and morbidity falls on populations with low socio-economic status (Jones et al. 2015). Likewise, a robust body of evidence from LMICs show a strong and consistent association between men’s use of alcohol and women’s risk of IPV (Abramsky et al 2011; Hindin et al. 2008, Gage 2005; Graham et al. 2008; Dalal et al 2009; Foran & O’Leary 2008); one systematic review pooled the results of 11 studies and found that harmful use of alcohol was associated with a 4.6-fold increased risk of exposure to IPV compared to mild or no alcohol use (Gil-Gonzalez et al 2006). Studies suggest that alcohol affects risk of IPV in multiple ways: as a trigger for arguments (Heise, 2012), by affecting problem solving and other cognitive abilities (Hoaken et al. 1998), by lowering inhibitions and making it easier to misinterpret verbal and non-verbal cues (Klostermann & Fals-Stewart, 2006), and by playing into culturally defined scripts about how alcohol affects behavior (Quigley & Leonard, 2006). While alcohol alone is neither necessary nor sufficient to cause violence, a recent review concluded that it meets all the epidemiological criteria for being considered a contributing cause of IPV (Leonard & Quigley, 2017).

4.2 Intra-household conflict pathway

While greater financial stability may reduce IPV by improving emotional wellbeing, access to cash can also affect violence directly by either reducing or increasing fodder for arguments. More cash can reduce marital conflict over money or it can increase conflict if the money is diverted to temptation
goods or partners disagree on how the money is spent. In the systematic review, Vives-Cases and Gil-Gonzalez (2009) found that marital conflict was significantly associated with IPV in 10 out of 11 studies identified.

**Decreased conflicts over money:** Conflicts over money have been identified by different studies in poverty contexts as a trigger for violent episodes in the couple (Rabbani 2008, Fehringer 2014). Our review showed that CTs seem to have an impact in reducing arguments of this type. From the papers included in our review, Buller et al. (2016) mixed methods analysis found that provision of cash to households reduces IPV, partially by eliminating the need for women to negotiate the daily cash she needs to buy food for the family. During qualitative interviews post-trial, women observed that transfers meant they didn’t have to ask their husbands for money, which eliminated a source of conflict in the relationship. Furthermore, Angeles (2008) in Uganda found that women reported that there was a decrease in fights that occurred in competing over scarce resources. The CT helped pay for a number of items such as school fees, medical bills or immediate needs, effectively reducing the arguments over money. Likewise, Yildrim et al (2014) found that according to respondents, a majority of fights and continued IPV appeared to be due to financial difficulties, with the majority of victims reporting IPV decreases or cessation after they started receiving the transfer.

“There had been many fights. Because children needed many things that we could not have afforded. I asked my husband and he used to say there is no money. Then I used to get upset and started to yell. We had many fights because of poverty. Not only for us, for all poor, fights come from suffering.” (Turkey, Yidrim et al 2014, p.72)

**Increased conflict over temptation goods:** It is also possible that an unintended effect of CTs could be an increase in spending on temptation goods by either men or women. This relationship has generally not been supported by the literature although there is limited global evidence on certain types of temptation goods (e.g. gambling, prostitution as compared to consumable goods). Evans and Popova (2017) conducted a systematic review on the link between CTs (both conditional and unconditional) in LMIC and temptation goods, primarily alcohol and tobacco. The authors included 50 estimates from 19 studies and concluded that there is no systematic evidence that beneficiaries increase spending on alcohol
and tobacco, a conclusion also reached by a recent analysis of seven government UCT programs in Africa (Handa et al. 2017). It is important to note that this does not mean that cash is not partially used to purchase these goods, but rather that there is no systematic difference from spending in non-beneficiary households.

4.3 Women’s empowerment pathway

CTs are often hypothesized to empower women either through increasing their direct access to cash, information (through trainings), or social networks (via group activities)—all of which can enhance women’s sense of empowerment. If resources are placed in the hands of women, her relative control of resources within the household improves, thus increasing her bargaining power and ability to negotiate her preferences. Direct receipt of cash also increases her financial autonomy and contributes to enhanced self-efficacy and confidence, potentially shifting the balance of power between the woman and her male partner.

Depending on how her partner reacts, this shift in power can either increase or decrease a woman’s risk of IPV. Greater female empowerment can strengthen a woman’s ability to exit an abusive relationship or at least credibly threaten to leave, which might deter her husband from using violence. Likewise, if the man’s reaction is positive and accepting, risk of violence may decrease as the man comes to appreciate both his wife’s competency and the added resources she brings to the household. Greater female empowerment, however, could result in more violence if a man reacts negatively to his wife’s willingness to assert her preferences more forcefully. Some men may feel threatened by this shift in power and may use violence to reassert their dominance and male authority in the family.

**CTs and empowerment:** Case studies support the notion that CTs can have transformational impacts on women’s empowerment through improved decision making and feelings of independence from partners (Yildrim 2014; Nuwakora 2014; Patel 2012). As women from Northern Uganda and Mexico reported:
“Earlier, we used to farm as a family. However, my husband would sometimes sell household items without consulting me. But now that I have my own money, I can have a say on how to spend income. Moreover, I cultivate the gardens together with my husband […]” (Uganda, Nuwakora 2014, p.9).

“I have seen that all mothers, like indigenous women that we are, things changed a lot. I notice it because now women participate a lot, when there is an assembly, or meeting, or ‘plática’. They participate a lot because they have this responsibility, in order for the support [transfer] to come.” (Mexico, Adato 2000, p.69).

Numerous studies have also shown that CTs increase women’s savings and income earning opportunities, suggesting that CTs may affect women's bargaining power (Perova et al. 2012; Natali et al. 2016; Green et al. 2015). However, the broader evidence is mixed. In a recent synthesis of qualitative and quantitative reviews and key evidence, van den Bold and colleagues (2013) find that although qualitative evidence on CCTs, largely from Latin America and the Caribbean, generally points to positive impacts on empowerment indicators, quantitative results are mixed. More recent studies focusing on the Africa region have come to the same broad conclusions (Bonilla et al. 2017), and others have raised competing arguments that CTs can reinforce traditional gender norms, or place additional burdens on women’s time use, further reinforcing gender inequities (Chant 2008; Molyneux 2006). At least part of the ambiguity around this linkage can be attributed to the diverse set of indicators used to measure empowerment and the inherent difficulty in drawing conclusions based on few quantitative indicators of intra-household bargaining (Peterman et al. 2015; Seymour & Peterman 2017). Adding to the complexities, intra-household empowerment is highly contextual, and there has been no clear consensus within and across disciplines of how to best measure it (Malhortra & Schuler 2005). Thus, although there are promising case studies, there are also mixed impacts, and a lack of consolidated evidence across program typologies and diverse contexts with differing gendered norms.

**Shifts in relationship power and IPV**: Another strand of literature has reviewed how empowerment and shifts in relationship power may decrease or increase IPV (Hughes et al. 2015; Perova 2012). Women’s risk of IPV based on the extent of her financial independence and self-confidence is complex, context-specific and contingent on factors such as: socio-cultural contexts of households,
characteristics of households and individuals, and particularities of empowerment processes themselves (Hughes et al. 2015). In terms of socio-cultural factors, in patriarchal contexts women’s empowerment is more likely to lead to increased conflict and IPV at least in the short term. Hence, the relative status of women and men in terms of decision-making and how their power and resources compare to each other is an important contributing factor for increased IPV (Hughes et al 2015). This seems especially common in situations where a man is unable to fulfil his gender-ascribed role as “bread-winner” and a woman is beginning to contribute relatively more to family maintenance, or where a woman takes a job that defies prevailing social convention (Hughes et al., 2015). This aligns with research by Maldonado, Najera and Segovia (2005) from Mexico that showed that significant income increases to women may threaten men’s status causing husbands with more traditional gender views to reassert control through violence. Overall, however, the risk of increased IPV could also decline over time as both men’s individual attitudes and broader social attitudes become more accepting of women’s increased economic activity and financial autonomy (Ahmed 2005). For example, some participants in the South African IMAGE intervention reported that the increased self-confidence, social support and communication skills gained from being part of a combined micro-finance and training initiative resulted in improved partner communication, preventing any conflict escalating into violence (Kim et al., 2007).

5. Conclusion and policy, programmatic and research implication

We conducted a mixed-method review of the impact of CTs on IPV in LMICs and built a program theory to help understand the mechanisms behind this impact. In total, we identified 14 quantitative and nine qualitative studies that met our inclusion criteria, of which 11 and six respectively showed support that CTs decrease IPV. We found little support for increases in IPV. Only two of our reviewed studies had overall mixed or adverse impacts. These findings, paired with the scale and relative cost-effectiveness of CTs, suggest that they have the potential to decrease IPV at the margin across large populations of vulnerable groups. However, across the 56 quantitative outcomes measured, approximately 63% were insignificant, suggesting that CTs may have different impacts on different types of violence.
within the same study. Transfers appear to reduce physical and/or sexual IPV more consistently than emotional abuse or controlling behaviours. This finding is an apparent contradiction since several of the pathways focus on emotional states which would suggest impacts on emotional and psychological IPV before trickling down to physical and sexual IPV. However, we conjecture that this could in part be due to measurement issues, as emotional IPV was less measured in studies, and as definitions of emotional abusive acts vary across cultures and are thus are more difficult to define.

As CTs are primarily a policy tool to respond to poverty and vulnerability, it is unlikely that large-scale institutional programming will be designed with the specific objective of decreasing IPV. However, if small design changes have potential to decrease IPV, a key indicator of wellbeing and gender equity, transfer programs have the scope to realize significant gains across sectors, at a lower cost than violence-specific programming. Research to better understand how CTs affect IPV and under what conditions, can help policymakers maximize these gains while minimizing any unintended negative impacts of CT programs. As collection of IPV measures in multi-topic surveys are likely to imply significant survey logistical costs, expanding the feasibility of experimental ‘light touch’ methods are likely to aid in understanding of dynamics in generalized programming (Peterman et al. 2017b).

We found evidence to support all three hypothesized pathways: economic security and emotional wellbeing; intra-household conflict; and women’s empowerment. We also found substantial evidence from related literature to support each step in the proposed causal chains, with the exception of increasing violence by exacerbating conflict over the consumption of temptation goods. According to our program theory, the economic security and emotional wellbeing pathway is the only one that exclusively reduces IPV; the other two may increase or decrease IPV, depending on whether additional cash aggravates or soothes relationship conflict and/or how men respond to women’s increased empowerment. How these pathways play out depends on intra-household gender dynamics, which are in turn are affected by local gender regimes and socio-economic inequalities within a setting or beneficiary population. Thus far,
quantitative evaluations in particular have not been well designed to measure these mechanisms, particularly those relating to relationship dynamics and behavioural intra-household measures.

The qualitative studies suggest that in highly patriarchal settings, shifts in household dynamics that are less challenging to traditional gender norms are less likely to prompt violence. Likewise, programs that generate smaller shifts in relationship power appear more easily accepted by men than those catalysing larger disruptions (Wasilkowska 2011, Slate and Mphale 2008, Maldonado 2005). For example, Buller and colleagues (2016) note that increased cash and in-kind transfers to women was accepted by Colombian and Ecuadorian men in part because it was intended for children’s nutrition, a domain already within the domestic responsibilities of women. Indeed, how a program is “framed” and the meaning imbued to cash by a program’s stated intent (e.g. for women’s entrepreneurship versus child health) may influence the transfer’s impact on gender dynamics and IPV as much as any other program feature. More “acceptable” shifts might also be achieved by making smaller, more regular transfers (conducive to small household purchases managed by women), rather than larger or lump sum transfers (Wasilkowska 2011). It should be noted, however, that the Kenya GiveDirectly study tested lump sum versus periodic transfers and found that the difference did not significantly affect the magnitude or impacts on IPV (Haushofer & Shapiro 2016). Understanding the importance of transfer size and other design features on intra-household dynamics is important, as economic security and poverty impacts are likely to be larger with increasing size of the transfer relative to pre-program household consumption, thus suggesting a potential program design trade-off.

The recipient of the CT, is also likely to be a key factor in understanding potential for impacts on IPV. While empirical evidence is scarce and mixed in terms of the impact of recipient sex on economic and human capital outcomes of transfers, there is even less evidence for how different targeting schemes affect IPV outcomes (Yoong et al 2012). Across the studies reviewed here, the majority transferred cash to women; therefore, a large gap in knowledge remains with respect to impacts on IPV when men are the main recipient, as is the case in many programs in Africa. Haushofer and Shapiro (2016) is the only study
that randomly compared male and female beneficiaries, and found no differential impact on IPV. These
differences will be particularly important in settings where men are the de facto recipient due to gendered
mobility constraints and lower perceived cultural acceptability of transferring benefits to women (e.g.
Middle East and parts of South Asia).

Lastly, the associated benefits from complementary activities such as trainings and group
meetings are also likely to be a key factor shaping how a CT program impacts IPV. Complementary
activities could independently decrease IPV by empowering women through increased knowledge leading
to increased self-esteem, social interaction, and social capital. Most CT programs reviewed are linked to
some complementary activities. While the literature acknowledges that complementary activities might
play a role in generating impacts, this mechanism is seldom explored explicitly. The Bangladesh study by
Roy and colleagues (2017) is the only one that attempts to separately evaluate the impact of the transfer
versus the transfer plus auxiliary activities. They find that decreases in IPV six months post program exist
only in the cash transfer plus BCC group and not in the CT only group.

It is worth mentioning that although average impacts of the studies reviewed overwhelmingly
show decreases in IPV, several studies found increases for select IPV outcomes within particular sub-
groups of beneficiaries (e.g. Bobonis et al. 2013; Hidrobo & Fernald 2013). In addition, we exclude two
studies where the cash transfers are one-time lump-sum grants as part of larger micro-enterprise program
with couples’ therapy or bundled livelihood, savings and coaching program. In the first study, Green and
colleagues (2015) find that women in Northern Uganda receiving the micro-enterprise training alone
experience increased marital control, while those with added couples therapy do not (and no impacts
among either group on physical or emotional abuse). In the second study, Ismayilova and colleagues
(2017) find that women in Burkina Faso benefiting from both arms of bundled savings and livelihoods
programming experience reduced emotional violence, however this effect is larger for women with those
receiving family coaching. Therefore, while our assessment is optimistic about the direction and level of
impacts on IPV, we recognize that diverse programming variations are yet to be widely tested and understood.

Our review has a number of limitations. We exclude studies that explore the impact of transfers on other types of violence that may have implications for IPV, including community-level violence or intra-household violence perpetrated or directed at other household members. For example, there is increasing interest and some potential for social safety nets, including CTs, to decrease violence against children, although the evidence is weak for most types of childhood violence apart from sexual violence and abuse among adolescent girls (Peterman et al. 2017a). Conclusions around promising mechanisms for reduction of violence against children relate to several of the same that we identify, including increases in economic security and decreases in poverty-related stress. This suggests that there is potential for CTs to affect multiple types of intra-household violence simultaneously, but no study to date has explored this potential. Likewise, transfers could decrease community violence through positive economic spill-overs into non-beneficiary households, or could increase violence due to social tensions and jealousy triggered by the CT (Adato 2000b, Beasly et al. 2016; Wasilkowska 2011, Slate & Mphale 2008). Finally, we cannot generalize our findings on household dynamics to high-income countries or from CTs to broader social protection or economic strengthening programs.

Our findings, however, have important implications for future research. First, evaluations should carefully consider the IPV metrics included in their study to ensure they capture internationally validated measures of IPV that are sensitive to program impact (Heise and Hossain 2017). To date, we know little about how CT may affect the frequency and severity of IPV, which would aid our understanding of dynamics at the margin. Second, studies need to go beyond impact to include validated and credible measurement of pathways to better understand the behavioral underpinnings of the CT and IPV relationship. In doing so, studies will deepen both our understanding of how transfers affect IPV, and our understanding of the behavioral relationships underpinning each causal link, many of which are understudied in LMICs. It is likely that mixed methods studies will advance our understandings of these
links better than either quantitative or qualitative studies alone; however to date few mixed methods evaluations have been conducted. There is also need for a better understanding of how program design features affect ultimate outcomes and pathways, particularly with respect to targeting, complementary programming, program linkages and conditionalities. Of the quantitative studies included in the review, only four included a research design able to test program variations (Green et al. 2015; Hidrobo et al. 2016; Roy et al. 2017; Haushofer & Shapiro 2016), and none were able to test potential synergistic effects between program components. There are large regional and contextual gaps in our understanding of dynamics, with evidence skewed to Latin America and little understanding of Asia and the Middle East, or of how dynamics may differ in humanitarian settings. Evidence from SSA is scarce (particularly empirical evidence) and is concentrated in Eastern and Southern Africa, with little evidence arising from Western and Central Africa, where gender norms and institutions may vary. Finally, we know little about long-term impacts, including how impacts may vary over time horizons and if impacts are non-linear, as well as the sustainability of impacts after CTs end or households graduate (the latter studied only by Roy et al. 2017).

Although our review indicates that CT are promising tools to reduce IPV, this relationship is complex and there are large gaps in our understanding of what program design components are necessary or beneficial in diverse settings. For example, it is likely that within any one program there are multiple or competing casual pathways operative, with differential distributional impacts or those that vary by type of IPV. It is also possible that impacts in the short-run may differ from longer-term impacts as relationships end and begin and programs are phased out. As cash and other transfers are increasingly scaled up in development settings, we welcome further research to better understand and leverage gains across sectors on non-traditional outcomes including IPV.
6. References


Buller, A.M., Hidrobo, M., Peterman, A., & Heise, L. (2016). The way to a man’s heart is through his stomach?: a mixed methods study on casual mechanisms through which cash and in-kind food transfers decreased intimate partner violence. BMC Public Health 16: 488.


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Heise, L., & Hossain, M. 2017. STRIVE Technical Brief: Measuring Intimate Partner Violence; London School of Hygiene and Tropical Medicine, London, UK.


Leonard, Kenneth E., and Brian M. Quigley. 2017. Thirty years of research show alcohol to be a cause of intimate partner violence: future research needs to identify who to treat and how to treat them. *Drug and alcohol review* 36(1), 7-9.


Peterman, A., Roy, S., Schwab, B., Hidrobo, M. & Gilligan, D.O. 2015. Measuring women’s decision making: Indicator choice and survey design experiments from transfer evaluations in Ecuador,


