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**Article:**

Borges Machado, Daiane, Teixeira De Siqueira Filha, Noemia orcid.org/0000-0003-0730-8561, Cortes, Fanny et al. (7 more authors) (2024) The relationship between cash-based interventions and violence : A systematic review and evidence map. *Aggression and Violent Behavior*. 101909. ISSN 1873-6335

<https://doi.org/10.1016/j.avb.2023.101909>

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## Journal Pre-proof

The relationship between cash-based interventions and violence:  
A systematic review and evidence map

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PII: S1359-1789(23)00096-4

DOI: <https://doi.org/10.1016/j.avb.2023.101909>

Reference: AVB 101909

To appear in: *Aggression and Violent Behavior*

Received date: 5 August 2022

Revised date: 6 December 2023

Accepted date: 29 December 2023

Please cite this article as: D.B. Machado, N.T. de Siqueira Filha, F. Cortes, et al., The relationship between cash-based interventions and violence: A systematic review and evidence map, *Aggression and Violent Behavior* (2023), <https://doi.org/10.1016/j.avb.2023.101909>

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**Full title:** The relationship between cash-based interventions and violence: a systematic review and evidence map.

**Short title:** A review of the association between cash-based incentives and violence.

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**Full title:** The relationship between cash-based interventions and violence: a systematic review and evidence map.

**Short title:** A review of the association between cash-based incentives and violence.

### **Abstract**

Violence of all types is a global public health problem. Cash-based incentives can potentially reduce violence outcomes by reducing economic hardship. We aim to deliver a comprehensive systematic review of the relationship between cash-based incentives with a variety of violence outcomes.

We searched studies assessing the relationship between cash-based incentives with violence outcomes at PubMed, EMBASE, Global Health and LILACS from the database's creation until July 12<sup>th</sup>, 2023. We evaluated the relationship of cash-based incentives on five types of violence outcome: intimate partner violence (IPV), child maltreatment, suicide, youth violence, and general violence. Cash-based incentives were grouped into Conditional Cash Transfer (CCT), Unconditional Cash Transfer (CCT), cash in combination with interventions other than cash(cash+), tax credits, cash for work and start-up grants. We classified the strength of evidence according to the study design and quality. An evidence map was developed to indicate gaps in the literature and impact (reduction, null and mixed). This systematic review is registered on PROSPERO, number CRD42020167049. The strength of evidence was mainly classified as moderate, or limited. The evidence map indicated research gaps on the effect of cash+ and cash for work on suicide and general violence, tax credit on general violence and start-up grants on child maltreatment, suicide, and general violence.

Despite the important number of mixed evidence, we found strong and very strong evidence that cash-based interventions reduced transactional and age-disparate sex amongst girls, suicide, IPV victimisation, physical, emotional and sexual IPV, and physical child maltreatment. Future studies should focus on the gaps found in this review.

**Keywords:** systematic review, cash-based interventions, cash transfer, violence, IPV, child maltreatment, homicide, and suicide.

## 1. Introduction

Violence is a global public health problem with lifelong consequences on health and well-being. It affects mental, physical, sexual, and reproductive health, leading to chronic health problems and alterations in behaviour, such as social isolation and hypervigilance (World Health Organization, 2014). Women, children, and old people are the most common victims of violence and human rights violations (World Health Organization, n.d., 2020). In 2017, deaths resulting from violence – including homicide, intimate partner violence (IPV) and violence against children – resulted in higher mortality than deaths from all armed conflicts worldwide (United Nations, 2020). Besides the severe social impact, the high economic burden is another consequence of violence, with some estimates showing that gender-based violence could cost USD 1.5 trillion to the global economy, or 2% of the global Gross Domestic Product (UN Women, 2016). Studies have found a strong association between violence and socioeconomic determinants, such as unemployment, limited educational opportunities, income, and gender inequalities (Chioda et al., 2016; Machado et al., 2018; Meloni, 2014; Stickley et al., 2012). Therefore, the implementation of social protection programmes could play an important role in reducing these inequalities, and potentially reduce violence outcomes (World Bank, 2018).

Social protection is defined as a set of policies and programmes designed to reduce and prevent poverty and vulnerability. According to the World Social Protection report published in 2021, 46.9% of the world population was covered by at least one social protection benefit in 2020. Eighty-four percent (84%) of Europe and Central Asia had their populations covered by this benefit, followed by the Americas 68%, Asia and the Pacific 39%, and Africa 18% (International Labour Organization, 2021). Over the past 20 years, governments have been increasing investments in large-scale social protection programmes, particularly those based on cash transfers (Department for International Development, 2015). As a result, cash-based incentives have spread quickly during the last decade, particularly in developing countries. These programmes can have conditionalities (conditional cash transfer - CCT), or not (unconditional cash transfer - UCT). Conditionalities may require attendance

at prenatal appointments and health promotion activities, school attendance for children and adolescents, and mandatory vaccinations for children (Barrientos & DeJong, 2006; Fiszbein & Schady, 2009).

The association between cash interventions and crimes may occur since socioeconomic hardship can increase the chances of people becoming involved in violent crimes (Hsieh & Pugh, 1993). Individuals who face high levels of economic frustration, when comparing themselves with individuals living in better situations, may be at a greater risk of committing an act of aggression against others, or themselves. An increase in income in a family with minimal resources reduces socioeconomic hardship, increases access to consumer goods, and reduces stress, family disruption, and alcohol consumption (Hidrobo et al., 2016).

Social and economic factors have been shown to be associated with suicide (Ahmed et al., 2001; Baird et al., 2013; Haushofer & Shapiro, 2016; Kilburn et al., 2016). There is some evidence of the existence of a cyclical association between poverty and poor mental health in low- and middle-income countries (Lund et al., 2011). Stress associated with economic circumstances and greater exposure to violence and traumatic situations may increase the risk of mental illness among people living in poverty (Lund et al., 2011). On the other hand, poor mental health can increase poverty by reducing the chances of employment, productivity at work, as well as a greater risk of job loss and, therefore, income, while also increasing expenses with medication and the cost of treatment (Krumpal, 2013; Lund et al., 2011; Van De Mortel, 2008).

Recent systematic reviews have explored the effect of cash-based incentives on different types of violence, mainly IPV, and focused on Low and Middle-Income countries (LMICs). Leite et al. (2019) included eight studies addressing cash transfers and evaluated the impact of this intervention on IPV. The review showed mixed results, with randomised trials likely to show a protective effect, and observational surveys likely to show a null impact of cash transfers on this type of violence (Leite et al., 2019). Buller et al. (2018) identified 14 quantitative studies analysing the impact of cash transfers on IPV. The authors suggested that cash transfers impacted violence, through the pathways of

economic security, well-being, reduced household conflicts, and women's empowerment. Again, these pathways could have ambiguous effects, and the impact on violence depends on the programme design and behavioural responses (Buller et al., 2018). Gibbs et al. (2017) included 13 studies analysing cash transfer interventions, also finding a mixed effect. The review indicated that unconditional cash transfers reduced, or had a null effect on both IPV and HIV risk behaviours, such as transactional and age-disparate sex (Gibbs et al., 2017). An evidence map by Cross and colleagues (2018), including 28 studies, demonstrated that multipurpose grants reduced gender-based violence (Cross et al., 2018). A review by Peterman et al. (2017) included 14 studies from LMICs, and indicated: (1) that one in five represent the protective effects of social safety nets on childhood violence, (2) promising evidence on young child measures, including violent discipline, and (3) sexual violence among female adolescents in Africa (less clear evidence of significant impacts in other parts of the developing world) (Peterman et al., 2017). A meta-analysis of 14 studies on IPV from LMICs found that cash transfers reduced physical violence by 4 percentage points, emotional violence by 2 percentage points, and controlling behaviours by 4 percentage points (Baranov et al., 2021). Additional meta-analysis of three studies from LMICs suggested that cash+ child protection programmes had the same effect as CCT/UCT in reducing the violent parental discipline of children (Little et al., 2021). A third meta-analysis of 19 randomised controlled trials found an association between women's economic empowerment and a reduction in emotional, sexual, and physical IPV (Eggers & Steinert, 2020). Table S2 in the supplementary material provides an overview of these and other reviews which have been recently published (Arango & Ellsberg, 2014; Bourey et al., 2015; Ellsberg et al., 2015; Tankard & Iyengar, 2018; Tappis et al., 2018; Vyas & Watts, 2009; Yount et al., 2017; Zurcher, 2017).

Despite the literature available, most of these reviews focused on LMICs, and addressed limited types of cash transfer interventions, and specific forms of interpersonal violence, such as IPV, or violence against children. However, the impact of cash-based incentives may apply to a broader range of interpersonal violence outcomes, such as community and gang violence, and so forth.

Additionally, the effect of cash-based incentives is still mixed, with studies indicating both positive and negative relationships of these programmes on violence outcomes. None of the literature reviews available evaluated the strength of the evidence, concluding the direction of the relationship which had been provided until this time. Therefore, our objective was to deliver a comprehensive review of the relationship of cash-based incentives on IPV, child maltreatment, youth violence, general violence and suicide. We also aim to provide the strength and direction of the evidence and research gaps by using an evidence map.

## 2. Methods

### 2.1. Search strategy

In this systematic review, we searched for peer-reviewed articles on PubMed, EMBASE, Lilacs and Global Health, from the establishment of the database until July 12<sup>th</sup>, 2023. We applied a combination of Mesh terms and keywords related to cash-based incentives and violence outcomes. PubMed was queried using the following search string one, while search string two was applied to the remaining datasets.

1. "cash transfer\*" OR "direct transfer\*" OR "funds transfer\*" OR "monetary transfer\*" OR "social transfer\*" OR "income transfer\*" OR "Food Assistance"[Mesh] OR "social protection" OR "social program\*" OR "safety net\*" OR "cash voucher\*" OR "cash allowance" OR "social transfer\*" OR "financial transfer\*" OR "social grant\*" OR "basic grant\*" OR "minimum income" OR "social assistance" OR "income support" OR ((money[TIAB] OR monetary[TIAB] OR cash) AND (intervention[TIAB] OR support[TIAB] OR payment[TIAB])) AND (Crime[MESH] OR crime[TIAB] OR robbery[TIAB] OR assault[TIAB] OR theft[TIAB] OR "drug trafficking" OR fraud[TIAB] OR rape[TIAB] OR "sex offence"[TIAB] OR torture[TIAB] OR "physical abuse" OR violence[TIAB] OR Aggression[Mesh] OR aggression[TIAB] OR homicide[TIAB] OR Suicide[MESH] OR suicide[TIAB] OR



self-harm[TIAB] OR abuse[TIAB] OR injur\*[MESH] OR injur\*[TIAB] OR maltreat\*[TIAB] OR mistreat\*[TIAB] OR neglect[TIAB])

2. ("cash transfer\*" OR "direct transfer\*" OR "funds transfer\*" OR "monetary transfer\*" OR "social transfer\*" OR "income transfer\*" OR "Food Assistance" OR "social protection" OR "social program\*" OR "safety net\*" OR "cash voucher\*" OR "cash allowance" OR "social transfer\*" OR "financial transfer\*" OR "social grant\*" OR "basic grant\*" OR "minimum income" OR "social assistance" OR "income support" OR ((money OR monetary OR cash) AND (intervention OR support OR payment))) AND (crime OR robbery OR assault OR theft OR "drug trafficking" OR fraud OR rape OR "sex offence" OR torture OR "physical abuse" OR violence OR aggression OR homicide OR suicide OR self-harm OR abuse OR injur\* OR maltreat\* OR mistreat\* OR neglect)

We also screened the reference list of relevant studies and previous systematic reviews on the theme and contacted experts in the field to recommend peer-review articles not captured by our search strategy. This systematic review is registered on PROSPERO, number CRD42020167049.

## *2.2. Study selection and inclusion criteria*

We included intervention and observational peer-review articles at the global level, published in English, Spanish, French, and Portuguese. The outcome of interest was the relationship between cash-based incentives and violence outcomes (CaLP, 2018). Thus, a range of programmes have been covered in this review, such as conditional and unconditional cash transfers, cash for work, tax credits, and cash-based labour market programmes, such as start-up grants.

Cash transfers were implemented in programs either without conditionalities monitoring and in conjunction with them or alternatively as an addition with other interventions (Cash+), such as early childhood development coaching programmes, community activities, skills training, and others. Studies assessing Microcredit and other financial schemes, as well as housing voucher interventions without a mention of a cash component, were excluded from the analysis.

Violence outcomes included IPV (physical, sexual, and psychological), youth violence, child maltreatment, suicide, and general violence (see definitions in Table 1).

### *2.3. Screening, data extraction and quality assessment*

Screening by title and abstract and full-text review was conducted independently by two reviewers (NTSF and FC), and conflicts were resolved via discussion with a third reviewer (DBM). Data extraction was performed independently by two reviewers (NTSF and FC) by using a predesigned extraction form in the format of Excel spreadsheet. The form included information about the study design, methods, outcomes and estimates. Any disagreements were resolved via discussion with a third reviewer (DBM). For quality and bias assessments of intervention studies, we used the Cochrane tool for trials (The Cochrane Collaboration, 2011). For observational studies (e.g. cross-sectional, case-control, and cohort), we used an adaptation of the National Heart, Lung and Blood Institute (NIH) tool (NIH, n.d.) (see adaptations in the supporting information). In all of these tools, we included the “other bias” item, describing limitations reported by the study authors. Intervention and observational studies were classified into three categories: high (score $>4$ ), moderate (score: 3-4), and low quality (score $<3$ ). For ecological studies, we described the study limitations and source of bias.

### *2.4. Data analysis*

We synthesised our findings as narrative summaries and tables. We also developed an evidence map (Miake-Lye et al., 2016) to report the type and strength of evidence, research gaps and future research needs, by grouping the body of evidence according to the type of intervention (conditional and unconditional cash transfers, cash+, cash for work, tax credits, and start-up grants) (Table 2), violence outcome (IPV, general violence, violent punishment, sexual violence, adolescent violence perpetration and suicide) and outcome (null effect, reduction, and increase in violence). We then ranked the body of evidence according to the quality and hierarchy of the studies (Table 3). We adapted this classification from Thachil et al., 2007 (Thachil et al., 2007).

## Results

Of 5,238 unique records identified, plus the reference list and expert consultancy, a total of 48 were included in our review (Figure 1). Most studies were from the Americas (24; 50%), followed by Africa (17; 35.4%), Western Pacific Region (3; 6.2%), the Eastern Mediterranean (2; 4.2%) and South-East Asia (2; 4.2%). Twelve studies were from high-income settings: the United States and Uruguay; 16 from upper-middle income countries (Argentina, Brazil, Ecuador, Mexico, and South Africa); 11 from lower-middle income countries (Bangladesh, Gaza, Indonesia, Kenya, Pakistan, Philippines, Tanzania, and Zimbabwe), and nine from low-income countries (Burkina Faso, Ethiopia, Liberia, Mali, Papua New Guinea, Rwanda, Togo and Uganda). The cash-based incentives included in this review were: the Bolsa Familia programme in Brazil, Prospera and Oportunidades in Mexico, Bono de Desarrollo Humano and the World Food Programme in Ecuador, the Unemployed Heads of Household Programme in Argentina, Ingreso Ciudadano and Plan de Equidad in Uruguay, the Minnesota Family Investment Program (MFIP), EITC, Temporary Assistance for Needy Families (TANF) and Child Tax Credit in the USA, Rwanda's cash-for-work, the Vision Umurenge Programme in Rwanda, the Government of Zimbabwe's Harmonized Social Cash Transfer, the Empowerment of Girls in Liberia, Trickle Up in Burkina Faso, the Women's Income Generating Support programme in Uganda, Programme de Filets Sociaux in Mali, Transfer Modality Research Initiative in Bangladesh, Program Keluarga Harapan in Indonesia, Palestinian National Cash Transfer Programme in the Gaza Strip, and the Benazir Income Support Programme in Pakistan, Productive Social Safety Net in Tanzania, Women of Worth in South Africa, Pantawid Pamilya Pilipino Programme and MaPa teens in the Philippines and Papua New Guinea. Seventeen studies (35.4%) reported the effect of cash-based incentives on IPV, 11 on youth violence (22.9%), eight (16.7%) child maltreatment, five (10.4%) assessed mixed outcomes, four (8.3%) addressed suicide and three (6.2%) focused on general violence. Our analysis found studies examining the impact of six types of cash-based incentives (CCT, UCT, cash+, start-up grants, cash for work, and tax credits) on different forms of violence. Most studies focused on CCT/UCT interventions with seventeen studies (35%), followed by cash+

interventions with 16 studies (33.3%, eight on tax credit (16.7%), four on cash for work (8.3%), three on startup grants (6.3%). The main study characteristics are described in Table 4. A summary of the key-results by cash-based incentives and violence outcome is provided below, and in Table 5

### 2.5. Evidence map and strength of evidence

Overall, most evidence showed that interventions decreased (n=30), or had a null impact (n=26) on violence. Seventeen studies found mixed impact which varied according to the population characteristics (e.g., race, gender, income), study setting (e.g., urban vs rural), study outcome (e.g., prevalence difference vs prevalence ratio) and type of cash transfer (e.g., refundable vs non-refundable EITC). Most evidence was classified as type III (moderate) or IV (limited). However, we found very strong evidence (type I) that cash plus reduced IPV victimisation and child maltreatment (Lachman et al., 2021); and that cash for work reduced physical, emotional and sexual IPV, and physical child maltreatment (Betancourt et al., 2020). We found strong evidence (type II) that CCT or UCT interventions reduced suicide (Machado et al., 2022); transactional and age-disparate sex on girls (Cluver et al., 2013) and start-up grants reduced emotional IPV (Ismayilova et al., 2018). We found moderate evidence (type III) that cash only reduced physical IPV; cash plus reduced physical child maltreatment and suicide (Carvalho et al., 2021; Christian et al., 2019; Kilburn et al., 2018); physical IPV (Briaux et al., 2010), physical and overall child maltreatment (Cancian et al., 2013; Jocson et al., 2023), sexual and youth violence perpetration (Palermo et al., 2021); tax credit reduced fight and threat (Moe et al., 2022). We found limited evidence (type IV) that cash only reduced domestic IPV, controlling behaviour (Borraz & Munyo, 2020; Hidrobo & Fernald, 2013) and suicide (Alves et al., 2019). Limited evidence was also found for cash plus incentives in reducing controlling behaviour, physical and/or sexual IPV (Bobonis et al., 2013; Hidrobo et al., 2016; Roy et al., 2019); for cash plus and cash for work in reducing physical child maltreatment (Barnhart et al., 2020; Heath et al., 2020; Roy et al., 2019) and youth violence (Cluver et al., 2016; Ivaschenko et al., 2017); also for start-up grants in reducing youth violence (Özler et al., 2020).

The evidence map indicated research gaps on the effect of cash+ and cash for work on suicide and general violence, tax credit on general violence and start-up grants on child maltreatment, suicide and general violence (Table S5).

## 2.6. Conditional and Unconditional Cash Transfers (CCT and UCT)

### 2.6.1. IPV

#### Reduction

In Uruguay, Borraz & Munyo (2020) found that the Plan de Equidad reduced domestic violence by 1.6% (Borraz & Munyo, 2020). In South Africa, Kilburn et al. (2018) found that a CCT programme significantly reduced physical IPV among young girls aged between 13 and 20 (intent to treat estimates, RR [95%CI]= 0.66 [0.59, 0.74],  $p > 0.001$ ) (Kilburn et al., 2018). In Ecuador, Bono de Desarrollo Humano significantly reduced controlling behaviours (intent to treat estimates [SE]= -0.06 [0.03], significant at 5%) (Hidrobo & Fernald, 2013).

#### Null effect

In Pakistan, the Benazir Income Support Programme had no significant impact on prevalence of emotional or physical IPV (Iqbal et al., 2021). In Brazil, Litwin et al. (2019) found null associations between Bolsa Familia and female homicide (Litwin et al., 2019). In Bangladesh, the UCT component of the Transfer Modality Research Initiative had no impact on emotional or physical IPV six to ten months after the programme had ended (Roy et al., 2019). In South Africa, Kilburn et al. (2018), found no effect on forced sex among young girls (Kilburn et al., 2018). In Ecuador, Bono de Desarrollo Humano had no effect on emotional and physical IPV (Hidrobo & Fernald, 2013).

#### Mixed effect

In Brazil, Leite et al. (2019) found that Bolsa Familia was associated with psychological IPV (coefficient [SE]: 0.287 [0.087],  $p = 0.001$ ) in wealthier families, but the study found no association between the programme and psychological or physical IPV among families living below the poverty line (Leite et al., 2019).

## 2.6.2. General violence

### Reduction

In Uruguay, the Plan de Equidad programme significantly reduced robberies ( $-1.798$  [SE 0.725], significant at 5%) (Borraz & Munyo, 2020). In Brazil, one ecological study found that Bolsa Familia programme significantly reduced homicide rates (rate ratio: 0.997; 95%CI: 0.996–0.997), and hospitalisation from violence (RR: 0.996; 95% CI: 0.995, 0.996) (Machado et al., 2018). Another ecological study conducted in Brazil found that the Bolsa Familia programme significantly reduced all crimes, robberies and violent crimes (Chioda et al., 2016). In Argentina, the Unemployed Heads of Household Programme also had a significant negative impact on property crimes (OLS [SE]=  $-0.0026$  [0.0011], significant at 5%), and its main categories: larceny (OLS [SE]=  $-0.0024$  [0.0012], significant at 10%) and robbery (OLS [SE]=  $-0.0016$  [0.0007], significant at 5%) (Meloni, 2014).

### Mixed effect

Despite the reduction on some types of general violence due to the Bolsa Familia programme, Chioda et al (2016) found mixed results on thefts, vandalism and drug crimes, which varied according to the empirical model adopted (Chioda et al., 2016).

## 2.6.3. Child maltreatment

### Reduction

In Brazil, cash transfer programme had a protective association against severe physical violence (adjusted OR: 0,5;  $p= 0,026$ ) (Carvalho et al., 2021).

### Null effect

Two studies evaluated the effect of CCT/UCT on child maltreatment. In Bangladesh, the UCT component of the Transfer Modality Research Initiative had no impact on child maltreatment (Roy et al., 2019). The Palestinian study did not find any association between cash transfers and child maltreatment (Abu-Hamad et al., 2014).

## 2.6.4. Youth violence

Null effect

The Cash Transfer for Orphans and Vulnerable Children programme administered by the Government of Kenya had no effect on transactional sex among adolescents (Rosenberg & Pettifor, 2014).

Mixed effect

One study in South Africa reported the effect of UCT interventions on the sexual abuse of adolescents aged between 10 and 18. The case-control study compared beneficiaries and non-beneficiaries of cash transfers and found that the intervention reduced the incidence of transactional sex (adjusted OR [95% CI] 0.49 [0.26, 0.93],  $p=0.029$ ) and age-disparate sex among girls (adjusted OR [95% CI] 0.29 [0.13, 0.67],  $p=0.004$ ). For boys no consistent effects were shown for any of the behaviours (Cluver et al., 2013).

## 2.6.5. Suicide

Reduction

In Brazil, Machado et al (2022) analysed a cohort of more than 110 million individuals including beneficiaries and non-beneficiaries from the Bolsa Familia programme during the period 2004-2015. The authors found a reduction of approximately 50% in the overall suicide rate amongst the beneficiaries of the programme (unadjusted IRR: 0.50; 95% CI: 0.49-0.52;  $p<0.001$ ) (Machado et al., 2022). Christian et al. (2019) observed a decrease in annual suicide rates in an Indonesian study. The nationwide cash transfer programme rollout reduced suicides by approximately 0.36 per 100,000 people per year (difference-in difference estimates [SE]: -0.358 [0.101],  $p<0.01$ ). The authors also used the results of a randomised controlled trial for the same programme to validate the rollout results, and found a decrease in the annual suicide rate (ANCOVA specification [SE]: -0.337 [0.226], non-significant) (Christian et al., 2019). Alves et al. (2018) applied an ecological approach covering 5,507 Brazilian municipalities, to identify the impact of the Bolsa Familia programme on suicide rates between 2004 and 2012. The authors found that increased coverage of Bolsa Familia can lead to a decrease in suicide rates. Compared with municipalities with low BFP coverage (<30%), suicide rates

were significantly lower in municipalities with coverage between 30%-70% (RR crude 0.966; 95% CI: 0.960, 0.972) and coverage >70% (RR crude 0.942; 95% CI: 0.936, 0.947) (Alves et al., 2019).

## 2.7. *Conditional or unconditional cash incentive implemented in conjunction with other programs (Cash+).*

### 2.7.1. IPV

#### Reduction

In the Philippines, parents from low income families receiving CCT plus a parenting intervention (MaPa) reported a 63% reduced risk of IPV victimisation at one month post-intervention (IRR = 0.37, 95%CI [0.06,0.68]) with 49% reduced risk at one-year follow-up (IRR = 0.51, 95%CI [0.01,1.00]) (Lachman et al., 2021). In Togo, an UCT associated with community activities led to lower odds of physical IPV among beneficiaries (difference-in-difference estimates [95% CI]= -7.9 [0.36, 0.99], p=0.048) (Briaux et al., 2020). In Bangladesh, Roy et al. (2019) assessed the post-programme impact of cash plus nutrition behaviour change communication (BCC), and found a statistically significant reduction in physical IPV (intent to treat estimates [SE]: -0.07 [0.03] significant at 5%) (Roy et al., 2019). In Ecuador, the World Food Programme, which provides conditional cash transfer and an accompanying training programme, significantly reduced controlling behaviours (intent to treat estimates [SE]= -0.08 [0.04]) and physical and/or sexual violence (intent to treat estimates [SE]= -0.05 [0.03]) (Hidrobo et al., 2016). In Mexico, the cash transfer programme Oportunidades had a significant impact on the reduction of physical IPV (OLS estimates [SE]= -0.052 [0.030], significant at 10% level) (Bobonis et al., 2013).

#### Null effects

In the Philippines, a CCT in addition to a community based programme targeting parents and teens support to prevent violence against adolescents found no effect on IPV in general and coercion (Jocson et al., 2023). In Togo, the UCT programme associated with community activities had no impact on controlling behaviour or emotional violence (Briaux et al., 2020). In Bangladesh, cash plus



nutrition behaviour change communication (BCC) had no significant effect on emotional or physical and emotional IPV (Roy et al., 2019). In Ecuador, the World Food Programme had no effect on emotional violence (Hidrobo et al., 2016). In Mexico, the CCT Oportunidades had no significant results on reducing emotional and sexual IPV (Bobonis et al., 2013). A randomised controlled trial in the USA found non-significant results of the Minnesota Family Investment Programme on reducing domestic abuse (Gennetian, 2003).

### Mixed effects

In South Africa, a CCT on attending a skill building intervention (Women of Worth- WoW) showed significant reduction in IPV indicators immediately after WoW (OR [95% CI], gender-based violence threat: 0.53 [0.41-0.69]; forced sex: 0.37 [0.27-0.52]; transactional sex: 0.50 [0.37-0.66]). But this reduction was not durable at follow-up (OR [95% CI], gender-based violence threat: 0.99 [0.76-1.30],  $p=0.964$ ; forced sex: 0.75 [0.50-1.11],  $p=0.152$ ; transactional sex: 0.83 [0.63-1.10],  $p=0.200$ ) (Naledi et al., 2022). In Mali, the Programme de Filets Sociaux found a significant reduction in physical, emotional and controlling behaviour IPV only in polygamous households (intent-to-treat estimates: physical -0.072;  $p<0.05$ ; emotional -0.126,  $p<0.05$ ; and controlling behaviour -0.161;  $p<0.01$ ), with no effect in other marriage arrangements (Heath et al., 2020). In Mexico, Canedo et al. (2019) found that a cash+ intervention, Prospero, significantly increased the prevalence of IPV (sexual and/or physical) amongst unemployed and employed women in urban settings and employed women in rural settings. However no significant effect was found amongst unemployed women in rural settings (Canedo & Morse, 2019). In the USA, more females reported IPV within 4 days of receiving welfare transfers (incidence rate ratio [SE] intimidation: 1.046 [0.011],  $p<0.01$ ; and assault: 1.007 [0.004],  $p<0.1$ ). However, no significant effect was found when receiving days 14-16 and days 30, 31 and 1st (Hsu et al., 2017).

## 2.7.2. Child maltreatment

### Reduction

In the Philippines, MaPa programme targeting violence prevention amongst adolescent child had mixed effects on child maltreatment. Physical abuse and overall child maltreatment reported by caregivers reduced significantly (mean 3.80 [SD 6.82],  $p=0.015$ ,  $d -0.39$ ; and mean 10.17 [SD 2.79],  $p=0.022$ ,  $d -0.46$ , respectively) (Jocson et al., 2023). Also In the Philippines, one randomised controlled trial evaluated the impact of a CCT associated with parenting interventions (MaPa) on child maltreatment for 120 low-income families with children aged 2-6 years. Adults reported reduced overall child maltreatment ( $d=-0.50$  [95%CI: -0.86, -0.13]), emotional abuse ( $d=-0.59$  [95%CI: -0.95, -0.22]), physical abuse (IRR = 0.51 [95%CI: 0.27, 0.74]), and neglect (IRR = 0.52 [95%CI: 0.18, 0.85]), at post-intervention and one-year follow-up (Lachman et al., 2021). In Mali, Heath and colleagues also evaluated the impact of the Programme de Filets Sociaux on the child maltreatment, and found a statistically significant reduction of any physical punishment (intent-to-treat estimates: -0.066;  $p<0.1$ ) (Heath et al., 2020). In Bangladesh, Transfers+BCC programme reduced significantly at the post-endline by 12 and 8 percentage points “Harsh physical punishment last week”, and “Hit child back when child hits parent”, respectively (Roy 2019). In the USA, a full child support pass reduced the risk of child maltreatment (OR 0.881 [SE 0.050], at 5% significance) (Cancian et al., 2013).

#### Null effect

In the Philippines, MaPa programme had no significant impact on emotional abuse and neglected reported by caregivers (Jocson et al., 2023). In Mali, Programme de Filets Sociaux found a null effect on psychological aggression of children [63] (Heath 2020). In Bangladesh, Transfers+BCC programme had no effect on emotional violence (Roy et al., 2019).

### 2.7.3. Youth violence

#### Reduction

A study conducted in Tanzania evaluated the impact of a conditional cash plus intervention on violence experiences among adolescents aged 14-19 years in 130 communities. Adolescents in the intervention had a reduction of 3-percentage-point on experiencing sexual violence ( $b= -0.03$ ; 95%

CI: -0.06, 0.00). Females had a 5-percentage-point reduction in sexual violence ( $b=-0.05$ ; 95% CI: -0.10, -0.00). Males reported less physical violence perpetration as a result of the intervention ( $b=-0.06$ ; 95% CI: -0.10, -0.02) (Palermo et al., 2021). In South Africa, a longitudinal survey evaluated the impact of UCT grouped with 'caring' social protection. The intervention reduced adolescent violence perpetration amongst boys aged between 10-18 (OR 0.67 [95% CI: 0.48–0.93]). Amongst girls, caring social protection significantly reduced sexual exploitation (OR 0.71 CI 0.52–0.98) (Cluver et al., 2016).

#### Null effect

Cash transfer plus the community based MaPa programme had no significant effect in adolescent exposure to community violence in the Philippines (Jocson et al., 2022). In Tanzania, Ranganathan et al (2022) performed a cluster randomised controlled trial in 130 villages. Adolescent girls and young women (14-19 years old), belonging to households receiving the Productive Social Safety Net programme, received the Ujana Salama "plus" intervention. The cash plus intervention showed no impact on reducing transactional sex (coefficient  $\beta$  0.003 [SE 0.07];  $p=0.905$ ) (Ranganathan, Quinones, et al., 2022). Another study in Tanzania, the conditional cash plus intervention had no impacts on emotional violence or physical violence (Palermo et al., 2021).

#### Mixed effect

In Kenya, a study evaluated the impact of two-year multisectoral cash plus programmes on young adolescent girls' violence outcome in two slum settlements (Kibera and Wajir). The study arm including a conditional cash transfer linked to an education component led to reductions in the experience of male-perpetrated violence in Kibera between 4 and 9 percentage points compared with an average of 42% in the control arm (violence component only vs violence + education components: OLS estimated [95% CI] -0.088, [-0.14, -0.03],  $p<0.01$ ; violence component only vs violence + education + health components: OLS estimated [95% CI]: -0.059, [-0.10, 0.02],  $p<0.05$ ). The inclusion of a CCT in the intervention components had no impact on reducing violence in Wajir (Austrian et al., 2021). In Zimbabwe, Chakrabarti et al. (2020), found that the Government of Zimbabwe's Harmonized Social Cash Transfer programme had a mixed effect, depending on the time

of outcome assessment (12 and 48 months). Youth report of exposure to slapped and pushed, attacked with a knife or other weapon and physical violence reduced significantly only at 48 months impact. No significant effect was found for severe physical violence and being hit with a fist/kicked/beaten with an object at 12 or 48 months (Chakrabarti et al., 2020).

## 2.8. Cash for work

### 2.8.1. IPV

#### Reduction

In Rwanda, the Vision Umurenge Programme in addition to an early childhood development coaching programme, Sugira Muryango, led to a 51% decrease in the odds of females reporting victimisation due to physical, emotional and sexual IPV (difference-in-difference estimates [95% CI]= -0.72 [-1.43,-0.01]) (Betancourt et al., 2020).

#### Null effect

The same study related no differences in fathers reporting IPV perpetration (Betancourt et al., 2020).

#### Mixed effect

In Ethiopia, a randomised controlled trial allocated participants in four treatment arms to measure the impact of public works and complementary programmes on IPV. Authors found no impacts of the complementary programming on IPV in the full sample, but some impacts among the poorest sample. This sample received either cash or poultry grants, nutrition intervention and livelihood complementary activities (T2 arm). Authors reported decrease in reports of physical and sexual violence from the T2 cash and poultry interventions when compared to the control arm (physical T2 x Cash -0.059 [SE 0.027],  $p < 0.05$ ; sexual T2 x Poultry -0.057 [0.021],  $p < 0.01$ ), and decrease in sexual violence in the past year of T2 (linear combination: effect of T2 -0.047 [0.020],  $p < 0.05$ ) and the poultry package (linear combination: effect of poultry -0.042 [0.019],  $p < 0.05$ ) (Ranganathan, Pichon, et al., 2022).

### 2.8.2. Child maltreatment

Reduction

In Rwanda, two cluster randomised trials evaluated the effect of the Vision Umurenge Programme on reducing child maltreatment rates. The programme was evaluated in combination with Sugira Muryango. Betancourt et al. (2020) analysed the effect of cash transfers preventing violent punishment in 1,049 families living in extreme poverty in Rwanda. Two categories of the Vision Umurenge Programme were analysed in combination with Sugira Muryango, (i) classic public works, which provide cash for manual labour, and (ii) expanded public works, which provide cash for labour and access to livestock. The study found that exposure to harsh discipline decreased 70% in families receiving Sugira Muryango plus cash, compared to those receiving CCT/UCT (difference-in-difference estimates, coefficient [95% CI]= -1.22 [-1.67, -0.76]; OR [95% CI]= 0.30 [0.19, 0.47]) (Betancourt et al., 2020). Barnhart et al. (2020) found a significant reduction in violent punishment in families receiving both cash and Sugira Muryango (cash+ Sugira Muryango vs CCT/CCT, 6-months after the intervention: 40% (95% CI: 16, 70) vs 60% (95% CI: 32, 83),  $p=0.1$  [72] (Barnhart et al., 2020).

## 2.8.3. Youth violence

Reduction

In Papua New Guinea, the cash for work programme reduced participants' frequency of threatening to use force by 13 percentage points, and of fighting back in response to an attack by 11 percentage points, which correspond to 65 and 25% reductions, respectively, relative to the baseline (Ivaschenko et al., 2017).

Null effect

The same study found no significant impact on adolescents involved in assaults and trespassing (Ivaschenko et al., 2017).

2.9. *Tax credit*

## 2.9.1. IPV

### Mixed effect

One study, conducted in the USA, assessed the effect of tax credit on IPV. Spencer et al. (2020) indicated that refundable EITC decreased the level of emotional IPV (difference-in-difference estimates [95%CI] = 0.71 [0.48, 1.04] , at 10% significance). Refundable EITC and TANF had no significant effect on coercion (Spencer et al., 2020).

## 2.9.2. Child maltreatment

### Mixed effects

In the USA, a study evaluating the impact of Child Tax Credit on reducing emergency department visits due to child abuse and neglected found significant decrease in these visits in the four days following advance payment disbursement among male children (point estimate, -0.40; 95% CI, -0.75 to -0.06;  $p=0.02$ ) and non-Hispanic white children (point estimate, -0.69; 95% CI, -1.22 to -0.17;  $p=0.01$ ). However, the general number of visits did not have statistically significant reduction (Bullinger & Boy, 2023). Also in the USA, a cross-sectional study found a significant reduction of the risk of child neglect in kinship families that received a combination of financial assistance in the full sample ( $b=-0.88$ ,  $p<0.05$ ) and in a subsample with household income  $>USD30,000$  ( $b=-1.31$ ;  $p<0.05$ ). There was no significant decrease in a subsample with household income  $\leq USD30,000$  ( $b=-1.07$ ; non-significant) (Xu et al., 2021). A third study addressing the effect of EITC e child tax credit found mixed effect on reducing child abuse according to the week of issuance. The tax credit had no effect when issued two and four weeks before, but the cumulative effect significantly reduced child maltreatment (number of child maltreatment reports per 100,000 children -16.8 [95% CI: -26.0, -7.7], significant at 1%) (Kovski et al., 2022). Another study evaluated the effect of EITC, a tax credit designed programme to provide relief for low-to-moderate-income working people, on hospital admissions attributed to abusive head trauma in children. The authors found that refundable EITC was associated with a 13% decrease in abusive head trauma admissions per 100,000 children (difference-in-difference, adjusted estimate [95% CI]= -3.1; [-6.5,0.3],  $p=0.08$ ), but non refundable EITC was not associated (Klevens et al., 2017).

### 2.9.3. Youth violence

#### Reduction

In the USA, Moe et al (2022) analysed in a cohort the effect of cumulative simulated EITC with general violence. EITC was associated with reduced risk of fighting at school or work (adjusted OR 0.85 [95% CI: 0.78, 0.93]; adjusted RD -22.4 [95% CI:-34.9, -9.9]) and of hitting or seriously threatening to hit someone (adjusted OR 0.92 [95% CI: 0.86, 0.98]; adjusted RD -16.0 [95% CI:-28.8, -3.2]) (Moe et al., 2022).

#### Null effect

The same study found no association between cumulative EITC and stealing something worth more than USD 50 (adjusted OR 0.90 (95% CI: 0.76, 1.06); adjusted RD -4.8 [95% CI: -12.4, 2.8]) (Moe et al., 2022).

#### Mixed effect

In the USA, Dalve and colleagues (2022) found significant lower prevalence of physical fighting with a 10-percentage point greater state EITC overall (PR: 0.96; 95% CI 0.94–0.99), amongst male students (PR: 0.96; 95% CI:-243,-55), white students (PR: 0.92; 95% CI:-184,-52), and other race and ethnicity students (PR: 0.89 (0.86, 0.91). No significant effect was found on physical fight and threatened or injured with a weapon on school property (Dalve et al., 2022).

### 2.9.4. Suicide

#### Mixed effect

In the USA, Morgan et al (2021) evaluated the impact of a refundable state-level EITC on suicide using repeated cross-sectional data. Authors found that a 10 percentage-point increase in the generosity of state EITC was associated with lower frequency of suicide deaths (adjusted prevalence difference -0.023 [95% CI: -0.037, -0.010];  $p \leq 0.05$ ). However, no significant impact was found when reporting prevalence ratio (Morgan et al., 2021).

### 2.10. Start-up grants

### 2.10.1. IPV

#### Reduction

In Burkina Faso, a cluster-randomised controlled trial found a significant reduction in emotional IPV (Trickle Up+ vs no intervention: OR 0.19, 95% CI [0.06, 0.64],  $p < 0.001$ ) (Ismayilova et al., 2018).

#### Null effect

The same study found no significant results in physical IPV (Ismayilova et al., 2018). Green and colleagues evaluated the impact of a start-up grant programme plus business skill training in reducing physical and emotional IPV in Uganda, and findings were not statistically significant (Green et al., 2015).

### 2.10.2. Youth violence

#### Reduction

In Liberia, Ozler et al. 2020, conducted a cluster-randomised controlled trial to evaluate the GE+ programme, which delivered mentoring programmes to adolescents, and cash incentive payments to their caregivers. The study evaluated several types of sexual violence (e.g. non-consensual touching, attempted rape, and pressurized sex), and only found a statistically significant reduction in non-consensual touching (OLS regressions at the 24-month follow-up [SE]: 0.046 [0.021], significant at 10%) (Ozler 2020).

#### Null effect

The same study found no effect on sexual violence, attempted rape and physical violence (Özler et al., 2020) (Ozler 2020).

### 2.11. Quality assessment, Cochrane, and NIH tools

Most intervention studies were classified as being of a low or moderate quality, and two studies achieved a high-quality ranking of five or more. The main bias reported was the lack of information on the blinding methods for both participants and outcome assessment. One case-control study ranked with a high quality score. Amongst cross-sectional and cohort studies, two were classified as



high quality, twelve as moderate quality, and three as low quality. The most recurrent biases identified across observational studies were social desirability, differential, selection, and survival bias (Table S4).

### 3. Discussion

Our review showed compelling evidence indicating that cash-based incentives can provide a protective factor against some types of violence, such as suicide and physical intimate partner violence (IPV) against women. Additionally, these incentives appear to play a role in safeguarding children and adolescents from instances of physical and sexual violence. However, regardless of the type of cash-based incentive, the results display mixed trends, indicating varied effects of such incentives on different violence outcomes.

IPV was the outcome with more peer-review publications on the impact of cash-based incentives on violence. On the other hand, there is a lack of evidence investigating the impact of these interventions on suicide (four studies) and general violence (four studies). A further gap is the lack of evidence from developed countries. These countries have a tradition of implementing social protection programmes, such as basic income security, covering a large proportion of the population. We identified evidence from two high-income countries: the USA and Uruguay.

In terms of the types of cash-based interventions, most studies evaluating CCT or UCT mainly addressed IPV. The implementation of cash transfer programs (UCT and CCT) in conjunction with other interventions, such as community activities and skills training, had a mixed effect on IPV and youth violence, with studies indicating a reduction in these outcomes presenting very strong evidence (type I). Integrating cash transfer initiatives with violence prevention strategies can contribute to a multifaceted approach in addressing the underlying causes of violence and mitigating its effects (Bobonis, Gonzáles-Brenes, and Castro, 2013; Lachman et al, 2021).

In relation to other types of cash-based incentives, such as cash for work, tax credits, and start-up grants, our review also uncovered mixed results. There is very strong evidence (Type I) supporting the efficacy of cash-for-work programs in reducing physical, emotional, and sexual IPV, as well as physical child maltreatment (Betancourt et al. 2020). Additionally, there is strong evidence (Type II) indicating the effectiveness of start-up grants in reducing emotional IPV. However, the impact of tax credits varied depending on intervention design (e.g., refundable or non-refundable EITC), study demographics (e.g., ethnicity and gender), and chosen data indicators (e.g., prevalence difference or prevalence ratio).

Despite the mixed findings, our review pointed a relationship between cash-based incentives and the mitigation of certain types of violence, including physical intimate partner violence (IPV) and violence against children. The mechanisms connecting cash-based incentives and violence, as elucidated by the scientific literature, revolve around economic empowerment and enhanced social well-being (Machado et al,2018; Machado et al., 2022; Alves et al,2018, Bobonis et al., 2013, Hidrobo and Fernald, 2016). The provision of monetary support through cash transfers can empower individuals and households economically, leading to improved living conditions, reduced stressors, and increased access to resources (Machado et al,2018; Machado et al, 2022; Alves et al,2018, Bobonis et al., 2013, Hidrobo and Fernald, 2016). Additionally, cash-based incentives might indirectly influence violence by promoting increased access to education, healthcare, and social services, fostering a sense of social inclusion and reducing vulnerabilities (Machado et al,2018; Machado et al, 2022; Alves et al,2018, Bobonis et al., 2013, Hidrobo and Fernald, 2016). Overall, the scientific literature highlights how cash-based incentives can address underlying socio-economic factors, subsequently contributing to the prevention and reduction of violence (Machado et al,2018; Machado et al, 2022; Alves et al,2018, Bobonis et al., 2013, Hidrobo and Fernald, 2016).

The mixed results found in both ours, and in other reviews, may be linked to the occurrence of bias and methods applied to collect, measure, and classify the violence outcome. Besides

underreporting, issues of precision can also be involved when collecting violence data through self-reporting, mostly because recall bias can interfere with the ability to accurately report the occurrence of violence. As discussed by Blair and Button 1987, three main factors affect the accuracy of the self-reported frequency of past events, (1) the actual frequency of the event; (2) question wording (e.g. the use of “how many times”); and (3) the reference timeframe (longer timeframes increasing the chance of error) (Blair & Burton, 1987).

García Moreno et al. (2004) also reflected on measurement issues, pointing out that emotional IPV is less frequently addressed in studies, and there is higher variability. The authors highlighted that definitions of emotional abuse can vary across cultures and, therefore, are more difficult to define (García-moreno, 2004; Heise et al., 2019). Our review found conflicts in classification of emotional IPV. We found two studies showing a reduction and null effect of CCT/UCT interventions on this type of violence, which measured emotional abuse and controlling behaviour (Hidrobo et al., 2016; Hidrobo & Fernald, 2013). A third study measured different categories of coercion and emotional abuse (Spencer et al., 2020). In our review, we classified psychological abuse and coercion into emotional IPV, which led to conflicting results.

Our review has strengths and limitations. Firstly, this is a comprehensive review including six violence outcomes: violence against women; violence against children, including sexual abuse and violent punishment; adolescent violence perpetration; suicide; and general violence, including homicide. Secondly, we evaluated the strength and type of evidence available, by using an evidence map. This provided a summary of the impact of different cash-based incentives on violence. Thirdly, the review indicated important gaps in research, in both cash-based incentive models and violence outcomes which should be considered in further studies. One limitation of this review is the exclusion of grey literature and working papers, which reduced the number of studies retrieved. However, limiting to recently published papers strengthen the quality of evidence reviewed. We wished to assemble the best evidence on this topic and to report an accurate, quantitative impact of

these interventions on violence. We did not locate papers on non-partner sexual violence against women and violence against old people. The exclusion of articles published in German, Italian, Swedish, and Danish could have led to the exclusion of evidence from developed countries. Another limitation is the heterogeneity of the measures and outcomes analysed in the selected studies, which made it impossible to perform meta-analysis. The indicators used to measure violence were sometimes by proxy, or other police data which may have also resulted in underreporting.

The lack of reliability of outcome data was a problem for some of the studies reviewed. For those focusing on individual-level outcomes, results based entirely on self-reported events may potentially introduce a number of limitations, such as social desirability, recall, and measurement and systematic errors (Krumpal, 2013; Stone et al., 2009; Van De Mortel, 2008) especially for violent events (Heise et al., 2019; Piquero et al., 2014). While service-related data is affected by the overreporting of more severe cases, missing information, and representativeness issues. Therefore, information from diverse forms of data acquisition may help better compose patterns of violence in the community.

All the studies evaluating the association of cash interventions with violence that ends in death were ecological and therefore could not answer the question as to whether being a beneficiary would be associated with decreased chances of being a homicide or suicide victim. However, it must be considered that the intervention (poverty alleviating programmes) is focused on the population group that accounts for a large proportion of violence-related outcomes, demonstrating that poverty acts as a strong social determinant of violence (Hsieh & Pugh, 1993; Morris et al., 2017; Pereira et al., 2017). Therefore, the plausibility that the variations of interest observed in the outcomes arise from the group of people not exposed to the intervention (i.e., ecological fallacies) is greatly reduced.

Finally, it is important to highlight that safety net programmes are primarily focused on reducing poverty, and reducing violence can be considered an extended benefit of these programmes.

Peterman and colleagues reflect on the importance of integrated systems, such as social and child protection, to reduce certain types of violence (Peterman et al., 2017). Similarly, despite the mixed type of evidence, our results showed that cash+ interventions are more likely to reduce violence, when compared with cash- only programmes.

#### **4. Conclusion**

Cash-based incentives are a powerful tool to reduce poverty and inequalities, particularly in developing countries. Our review revealed the effect of these programmes on reducing certain types of violence. We found evidence indicating that cash-based incentives are likely to protect women from IPV, and children and young people from physical and sexual violence. Further research should focus on the evidence gaps found in our review, i.e. cash+ and other forms of cash-based incentives, and certain types of violence, such as suicide and adolescent perpetration. Lastly, further studies should address the research gaps identified in this review, the cost-effectiveness of these interventions, and how the population is affected by these programmes.

#### **Contributions**

NTSF and FC screened the articles, performed the data extraction, quality assessment, and worked on the review updates. Conflicts were resolved via discussion with DBM. DBM devised and wrote the first version of the draft. NTSF, FC performed the data extraction and quality assessment of the extra papers included in the review. All the authors revised and approved the final version.

#### **Funding**

The protocol reported in this publication was supported by the National Institute of Mental Health of the National Institutes of Health under Award Number R01MH128911. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

**Declaration of competing interests**

None declared.

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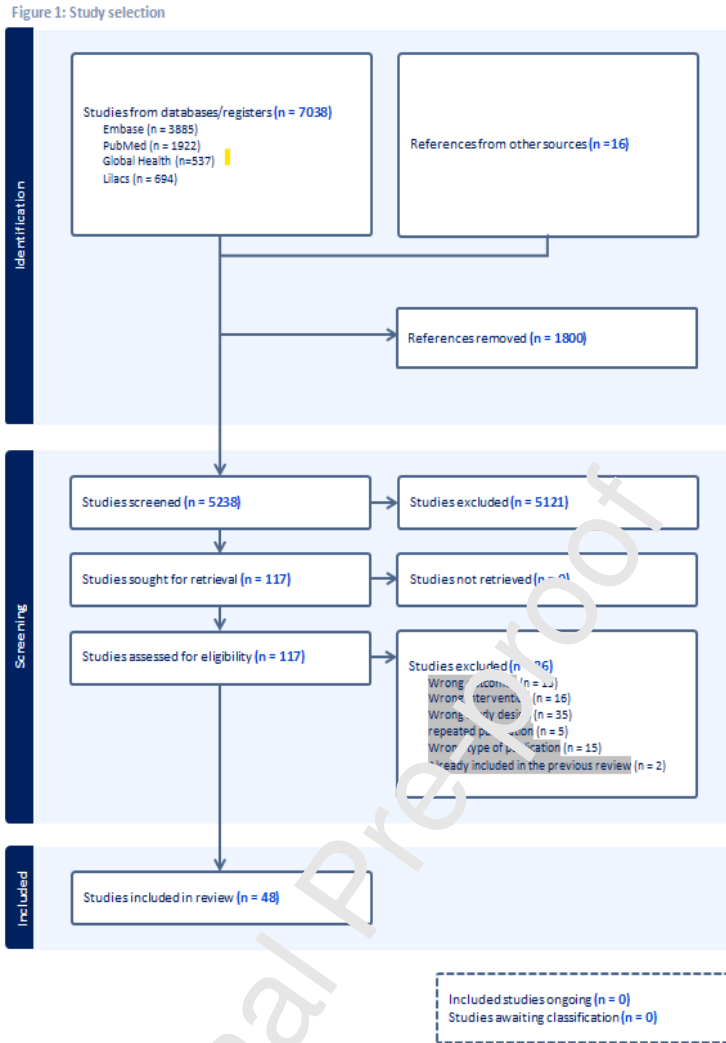
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Journal Pre-proof

**Conflicts of interest**

The authors have no conflicts of interest to declare. All co-authors have seen and agree with the contents of the manuscript and there is no financial interest to report. We certify that the submission is original work and is not under review at any other publication.

Journal Pre-proof



\* Wrong publication type: case report; protocol; news article; editorial; thesis; conference abstract; comment; law; bulletin; book chapter; working paper, brief report \* Wrong outcome: not addressing violence; civil conflict; armed conflicts; wars; terrorism; social segregation \* Wrong population: animal and plants studies Foreign language: studies not published in English, Portuguese, Spanish or French

Tables

Table 1. Operational definitions of violence outcomes

Violence Outcomes	Operational definitions
IPV/Gender-based violence	Sexual abuse, physical and/or psychological violence committed by an intimate partner. IPV includes harmful and potentially harmful acts, sexual coercion or assaults, threats to kill or harm, restraint of normal activities, or freedom and denial of access to resources. IPV may also be continuous exposure to behaviours designed to control and dominate.
Youth violence (amongst 10-29 years old)	Adolescent violence perpetration and violence against adolescents. It includes (robbery, vandalism, and carrying a knife or gun, physical violence, rape, transactional sexual exploitation sex in exchange for food, shelter, school fees, transport, or money, age-disparate sex (sexual partner more than five years older

	than the adolescent).
Child maltreatment	Abuse that occurs to children under the age of 18. It includes all types of physical violence, such as insults, being shouted or screamed at, shaken, slapped, or beaten, as a form of punishment.
Suicide	Intentional self-inflicted injury and attempted.
General violence	Robbery, theft, violent crime, vandalism, drug crime, property crime, larceny, robbery, aggravated assault, and homicide

Table 2. Types of cash-based incentives

Types of cash-based incentives	Description
Conditional cash transfer (CCT)	Prerequisite activities or obligations that the recipient needs to fulfil, to continue receiving the transfer (CaLP, 2018; Pellerano et al., 2016)
Unconditional cash transfer (UCT)	Transfers provided without the recipient having to fulfil any requirements, in order to receive assistance (CaLP, 2018; Pellerano et al., 2016)
Cash+	Cash interventions (CCT or UCT) combined with interventions other than cash
Cash for work	Cash payments provided on the condition of undertaking designated work (The United Nations Refugee Agency, 2012)
Start-up grant	Offer of cash to encourage families to start a business (Green et al., 2015)
Tax credit	Refers to credit taxpayers can subtract from their tax obligations, based on the family composition, e.g. if they are married and have children, etc (Sykes et al., 2015).

Table 3. Evidence quality grading system

Type of evidence	Quality assessment tool	Quality score	Strength of evidence grade
The body of evidence includes at least one well-designed, randomised, controlled trial.	Cochrane tool	One intervention study ranked=5	Type I evidence, very strong
The body of evidence includes at least one randomised controlled trial with minor limitations, or one well-designed observational study (cohort or case-control).	Cochrane and NIH tools	One intervention study ranked=4, or one observational study ranked=5	Type II evidence, strong
The body of evidence only includes observational studies (cohort, case-control, cross-sectional, or longitudinal surveys), or intervention studies with minor limitations.	Cochrane and NIH tools	Intervention studies ranked=3, or observational studies ranked=4	Type III evidence, moderate
The body of evidence only includes studies with major limitations.	Cochrane and NIH tools	Only intervention studies ranked< 3, or observational studies ranked<4	Type IV evidence, limited

Table 4. Study characteristics

Reference	Country	Study design, violence, tool/data source	Sample size	Intervention	Recipient	Transfer characteristics
Machado 2022	Brazil	Quasi-experimental Observational, cohort 100 Million Brazilian Cohort Suicide	114,008,317 individuals	BFP CCT <u>Conditionalities:</u> minimum of 85% school attendance (children); attending health care appointments (prenatal care-women; vaccination-children)	Monthly per capita income of <BRL 70, or <BRL 140 if child, adolescent, or pregnant woman in the family	<u>Amount:</u> BRL 70 in 2014 <u>Size:</u> 9% of the Brazilian minimum wage <u>Frequency:</u> monthly
Iqbal 2021	Pakistan	Observational, cross-sectional Women's empowerment in impact evaluation survey IPV	9,975 households	Benazir Income Support Programme (BISP) Unconditional cash transfer (UCT)	Poor women	<u>Amount (2020):</u> Rs. 6,000 <u>Frequency:</u> quarterly
Carvalho 2021	Brazil	Observational, cross-sectional The Parent-Child Conflict Tactics Scales (CTSPC) Child maltreatment	274 patients attending a psychosocial care unit	BFP CCT	Low-income families	NR
Borraz 2020	Uruguay	Ecological Banco de Fomento Social, Instituto Nacional de Estadística, Ministry of the Interior IPV, general violence	24 policy jurisdictions	Ingreso Cuidadano (in 2002) Plan de Equidad (in 2008) Conditional cash transfer (CCT) <u>Conditionalities:</u> school attendance records and regular health status control for each child in the household	Women (~95%)	<u>Amount:</u> <i>Ingreso Cuidadano</i> programme - USD67 (2014 US dollars) <i>Plan de Equidad</i> programme - increasing the cash payment from around USD67 to USD131, and a 15 percent increase in the number of beneficiaries. <u>Frequency:</u> monthly
Leite 2020	Brazil	Observational, cross-sectional Structured questionnaire IPV	807 women	BFP CCT <u>Conditionalities:</u> educational and health actions aimed at children and adolescents	Poor and extremely poor families (monthly p.c. income of up to USD 80)	<u>Frequency:</u> monthly

Reference	Country	Study design, violence, tool/data source	Sample size	Intervention	Recipient	Transfer characteristics
Litwin 2019	Brazil	Ecological Sistema de Informações de Mortalidade (National mortality data base – SIM) IPV	2,199 municipalities	BFP CCT <u>Conditionalities:</u> health and education conditions	Poor and extremely poor families	<u>Amount:</u> USD5 per child, and maximum of USD19 in 2006 <u>Size:</u> 30% of the p.c. poverty line <u>Frequency:</u> monthly
Roy 2019 <sup>a</sup>	Bangladesh	Cluster randomised controlled trial IPV modules in the WHO Violence against Women instrument, Early Childhood Development Child maltreatment, IPV	2,749 mother-child pairs	Transfer Modality Research Initiative (TMRI) Cash transfer (CT) * TMRI was evaluated alone and with a behavioural change in communication (BCC)	Mothers with a child aged between 0 and 24 months	<u>Amount:</u> 1,500 taka (approximately USD19) per household <u>Frequency:</u> monthly
Christian 2019	Indonesia	Ecological and Cluster-randomised controlled trial Censuses of all Indonesian villages (PODES) Suicide	3,152 subdistricts (ecological) 300 subdistricts (RCT)	Program Keluarga Harapan CCT <u>Conditionalities:</u> participation in health and education services	Poor households	<u>Amount:</u> between \$39 and \$220 <u>Size:</u> about 10% of pre-PKH yearly household expenditure <u>Frequency:</u> annual
Kilburn 2018	South Africa	Randomised controlled trial Audio Computer-Assisted SelfInterview (ACASI) IPV	2,448 young women	CCT <u>Conditionalities:</u> school attendance	Young women and their parent/guardian	<u>Amount:</u> 100 Rand (~ USD 10) for young women; 200 Rand (~USD 20) for the parent/guardian (2012 conversion rates) <u>Size:</u> 34-68% (“At the baseline, monthly per capita household expenditure was 295 Rand”) <u>Frequency:</u> monthly
Machado 2018	Brazil	Ecological Brazilian Ministry of Health’s Mortality Information System, Hospitalisation	5,507 municipalities	BFP CCT (municipal coverage) <u>Conditionalities:</u> children’s school attendance, women and children’s health care appointments	Family with monthly p.c. income <USD 22, or <USD 44 if the family includes a child, adolescent, or pregnant woman	NR

Reference	Country	Study design, violence, tool/data source	Sample size	Intervention	Recipient	Transfer characteristics
		Information System General violence				
Alves 2018	Brazil	Ecological Health Informatics Department of the Brazilian Ministry of Health suicide	5,507 municipalities	BFP CCT <u>Conditionalities:</u> monitoring of vaccinations and nutritional surveillance of children, pre-natal care for pregnant and postpartum women, and school attendance for children and adolescents	Mothers from extremely poor families (monthly family income of up to BRL 70)	<u>Amount:</u> BRL 70 in 2012; variable benefit of BRL 32 (when p.c. household income < BRL 140) <u>Frequency:</u> monthly
Chioda 2016	Brazil	Ecological INFOCRIM database: COMPSTAT-like crime tracking system from the Secretariat of Public Security of the State of São Paulo General violence	2,324 students	BFP and Sao Paulo's Renda Minima CCT <u>Conditionalities</u> BFP: school enrolment, participation in vaccination programmes, growth and development calendar, prenatal care for pregnant women, and health monitoring for lactating women. <u>Conditionalities - Renda Minima:</u> school enrolment and minimum attendance, and fulfilment of a vaccination calendar	Families with a monthly per capita (p.c.) income <BRL70, or adolescents of families with a monthly p.c. income <BRL140.	<u>Amount BFP (2009):</u> BRL68 for families with a monthly p.c. income <BRL70. For families with a monthly p.c. income <BRL140: variable benefit of BRL22 per child under the age of 15 (max 3 children) and variable youth benefit of BRL33 per adolescent aged 16-17 (max 2 adolescents). Maximum BFP benefit amount: BRL200 per family, for families with a monthly p.c. income <BRL70, 3 children under the age of 15, and 2 adolescents aged 16-17. Total amount = BFP + Renda Minima: BRL140 for families with one child, BRL170 for families with two children, and BRL200 for families with three or more



Reference	Country	Study design, violence, tool/data source	Sample size	Intervention	Recipient	Transfer characteristics
						children <u>Size:</u> Bolsa Familia transfers would amount to between 14% and 32% of the aggregate household income <u>Frequency:</u> monthly
Meloni 2014	Argentina	Ecological  Bureau of Criminal Statistics (Dirección Nacional de Política Criminal, Ministerio de Justicia y Derechos Humanos)  General violence	23 provinces	Unemployed Household Program (Programa Jefes y Jefas de Hogar Desocupados CCT) - <u>Conditionalities:</u> 20 hours of community service, training activities, school attendance, or up to six months' work with a private company	Unemployed household with pregnant women or children aged under 18 living at home	<u>Amount:</u> 150 pesos <u>Size:</u> 14.6% of the average public sector salary, and approximately 75% of the minimum wage
Abu-Hamad 2014	Gaza/Palestine	Observational, cohort  Strength and Difficulties Questionnaire (SDQ): Self-Esteem, Self-Efficacy and Hope Scales  Child maltreatment	44,363 households	Palestinian National Cash Transfer Programme CT	Extremely, or severely poor household	NR
Rosenberg 2014	Kenya	Cluster-randomised controlled trial  Household survey  Youth violence	443 individuals	Cash Transfers for Orphans and Vulnerable Children UCT	Households caring for an orphan or vulnerable child	<u>Amount:</u> Kenya Shillings (KES) 1,500 (USD22) <u>Frequency:</u> monthly <u>Size:</u> ~ 15 % of the median monthly per capita expenditures of recipient households

Reference	Country	Study design, violence, tool/data source	Sample size	Intervention	Recipient	Transfer characteristics
Hidrobo 2013	Ecuador	Cluster-randomised controlled trial Household survey IPV	2,354 mothers	Bono de Desarrollo Humano (BDH) UCT	Mothers in households who were in the bottom two poverty quintiles, according to the Sistema de Selección de Beneficiarios (SELBEN) index	<u>Amount:</u> 100,000 sucres (~ USD15) in 2005 <u>Size:</u> ~ 6–10% of an average household's pre-transfer expenditure <u>Frequency:</u> monthly
Cluver 2013	South Africa	Observational, case-control Alabama Parenting Questionnaire Youth violence	3,515 adolescents	Child support grant UCT Foster child grant CCT <u>Conditionalities:</u> court hearings with assessments by social workers, proof of medical care, school attendance, and bi-annual reassessment	Child support grant: primary caregivers of children who earn less than a means-tested benchmark Foster child grant: primary caregivers of a child legally in their care, as a result of being orphaned, abandoned, at risk, abused, or neglected	<u>Amount:</u> ZAR250 in 2010, ZAR280 in 2012; USD35 for child support grant; ZAR710 in 2010, ZAR770 in 2012; USD96 for foster child grant <u>Frequency:</u> monthly
<b>Cash+</b>						
Jocson 2023	Philippines	Pre-post pilot experimental study International Society for Prevention of Child Abuse and Neglect Child Abuse screening tool (ICAST-F-T), ICAST parent version, ICAST child version IPV, child maltreatment, youth violence	60 (30 primary caregivers and 30 target adolescent child aged 10 to 17)	CCT + MaPa Teens <u>Conditionalities:</u> regular health checks and vaccination, enrollment of the child in school with at least 85% attendance rate per month, and attendance in monthly family development sessions	Low-income families with children ages 0–18	NR
Ranganathan 2022a	Tanzania	Cluster-randomised controlled trial Questionnaire with additive transactional sex index Youth violence	130 villages	Productive Social Safety Net (PSSN) programme: (1) bi-monthly cash transfer; (2) public works programme during the lean season; (3) livelihood enhancement component UCT and CCT Ujana Salama	Adolescents aged 14–19 years living in PSSN households	<u>Amount (Ujana Salama):</u> USD 80 (asset transfer)

Reference	Country	Study design, violence, tool/data source	Sample size	Intervention	Recipient	Transfer characteristics
				“plus”: (1) livelihood and sexual and reproductive health (SRH) life skills training; (2) mentoring and asset transfer; (3) supply-side strengthening of adolescent-friendly HIV and SRH services and linkages to existing SRH and HIV services for adolescents <u>Conditionalities</u> (PSSN); health seeking (young children and elderly), children’s school enrolment		
Naledi 2022	South Africa	Quasi-experimental Randomised controlled trial  Sexual reproductive health SRH/HIV risk assessment questionnaire  IPV	5,115 participants	Women of Worth (WoW) + CCT <u>Conditionalities</u> : attending skills building intervention	19-24-year-old women	<u>Amount</u> : ZAR300; \$22 + ZAR50 (\$3,44) reimbursement on a first-come, first-served basis to a maximum of 1000 participants <u>Frequency</u> : after attendance at each session
Palermo 2021	Tanzania	Cluster-randomised controlled trial  Adapted version of questionnaire items used in WHO Multi-country Study on Women’s Health and Domestic Violence, Conflict Tactics Scale  Youth violence	130 communities 904 adolescents	PSSN + “Ujana Salama” CCT, livelihoods enhancement and public works + productive grant <u>Conditionalities</u> (PSSN); school enrolment and health-related co-responsibilities <u>Conditionalities</u> (Ujana Salama); attending trainings and developing an approved educational or business plan	Adolescents aged 14–19 years living in PSSN households	<u>Amount</u> : PSSN: USD7.10 per month, variable (depending on school enrolment and health-related co-responsibilities; max USD21.70 per month) Ujana Salama productive grant: USD 80 <u>Size</u> : 16% of household consumption <u>Frequency</u> : PSSN: bi-monthly Ujana Salama productive grant: up to 2 payments
Lachman 2021	Philippines	Randomised controlled trial  ISPCAN Child Abuse	120 families	Pantawid Pamilya Pilipino Programme (4Ps) CCT Masayang Pamilya	Low-income families with children aged 2–6 years	<u>Amount</u> : ~USD10 to USD30 <u>Frequency</u> : monthly

Reference	Country	Study design, violence, tool/data source	Sample size	Intervention	Recipient	Transfer characteristics
		Screening Tool - Trial Caregiver; Parenting Scale; ICAST-TC-Attitudes Subscale; UNICEF Multiple Indicator Cluster Survey (MICS); Revised Conflict Tactics Scale Short Form  Child maltreatment, IPV		Para Sa Batang Pilipino Parenting Programme (MaPa): group-based parenting programme <u>Conditionalities:</u> health and education conditions, attending monthly Family Development Sessions (FDS)		
Austrian 2021	Kenya	Individual and cluster randomised trials  Household survey  Youth violence	2,390 girls in Kibera and 2,117 girls in Wajir	Facilities: violence prevention (V), Education (E), Health (H) and Wealth creation (WC) Interventions: V only, V+E, V+E+H, V+E+H+WC, CCT <u>Conditionalities:</u> girl's school attendance	Household head and schools	Education component <u>Amount:</u> Household head: USD11 in Kibera, USD15 in Wajir School, partial fees: USD7 for primary and USD60 for secondary School, per girl: USD5 <u>Frequency:</u> Household head: Two transfers (enrolment and upon verified continued attendance) Schools: Upon enrolment per term
Briaux 2020	Togo	Cluster-randomised controlled trial  WHO's Violence Against Women instrument (VAWI)  IPV	2,031 mother-child pairs	UCT + package of community activities (BCC + integrated community case management of childhood illnesses and acute malnutrition)	Mothers	NR
Chakrabarti 2020	Zimbabwe	Observational, cohort  Youth and household surveys	3,063 households	UCT + complementary services (child protection/welfare)	Labour constrained and food-poor households	<u>Amount:</u> USD10, USD15, USD20 and USD25 for households with one, two, three, and four or more members,

Reference	Country	Study design, violence, tool/data source	Sample size	Intervention	Recipient	Transfer characteristics
		Youth violence				respectively <u>Size:</u> ~20% of pre-programme monthly household expenditure <u>Frequency:</u> monthly
Heath 2020	Mali	Cluster-randomised controlled trial WHO Violence Against Women instrument IPV, child maltreatment	1,550 women under 50 years old who were in the baseline data and married at the baseline	Programme de Filets Sociaux (Jigisémèjiri) CT + accompanying measures (two training sessions per month)	Heads of household, mostly men	<u>Amount:</u> 10,000 FCFA per month (~USD18.02) <u>Size:</u> 9% of beneficiary household's monthly consumption <u>Frequency:</u> every quarter over a 2-year period
Canedo 2019	Mexico	Observational, cross-sectional Mexican National Survey on the Dynamics of Household Relationships (Encuesta Nacional sobre la Dinámica de las Relaciones en los Hogares or ENDIREH) IPV	66,943 partnered women	Prospera programme (previously Oportunidades) CCT was evaluated in isolation and combined with working <u>Conditionalities:</u> health and education-related responsibilities	Women in households whose per capita income does not cover the basic food basket, or whose members are at risk in terms of nutrition, health, and education	NR
Hsu 2017	USA	Ecological National Incident-Based Reporting System (NIBRS) IPV	21 states	Temporary Assistance for Needy Families (TANF) CT + child care, education, job training and other services	Needy families with at least one dependent child.	<u>Amount:</u> average payment of USD383 in 2008 <u>Frequency:</u> monthly
Hidrobo 2016	Ecuador	Cluster-randomised controlled trial WHO Violence Against Women Instrument IPV	1,226 women	World Food Programme (WFP) CCT <u>Conditionalities:</u> attendance of monthly nutrition training	Colombian refugees and poor Ecuadorian households	<u>Amount:</u> USD40 per household (total of USD240 over a six-month study period) <u>Size:</u> 11% of a household's monthly pre-transfer consumption <u>Frequency:</u> monthly
Cluver 2016	South Africa	Observational, cross-sectional National Survey of HIV and Sexual	3,515 adolescents	Child-focused cash transfer (Child Support or Foster Child grant) CT was evaluated, grouped with	Low-income families with a resident adolescent (12-18 years-old)	NR

Reference	Country	Study design, violence, tool/data source	Sample size	Intervention	Recipient	Transfer characteristics
		Behaviour amongst Young South Africans Youth violence		access to 'caring' social protection (sustained receipt of positive parenting, or good parental monitoring and social support from educators) <u>Conditionalities:</u> evidence that families use the cash primarily for food and school expenses		
Bobonis 2013	Mexico	Observational, cross-sectional National Survey on Relationships within the Household IPV	2,867 women	Oportunidades CCT + education, health and nutrition components <u>Conditionalities:</u> school attendance, school performance, and preventive health care visits	Mothers from marginal, rural communities	<u>Amount</u> (1998): education component 70 to 625 pesos; health and nutrition components: 12 pesos <u>Size:</u> 10% of average expenditure of beneficiary families <u>Frequency:</u> monthly
Cancian 2013	USA	Cluster randomised controlled trial Child Support Demonstration Evaluation Child maltreatment	13,062 mothers	Child support + Wisconsin's TANF programme <u>Conditionalities:</u> community service jobs	Low-income, unmarried mothers	<u>Amount:</u> average of USD101 additional child support in the first year of the experiment, and an additional USD102 in the second year; among those with a child support order at assignment, the amounts were USD180 and USD174 <u>Frequency:</u> monthly
Gennetian 2003	USA	Randomised controlled trial University of Michigan's Research on the Study of Domestic Violence, Questionnaire No. 3 IPV	1,929 families	Minnesota Family Investment Program (MFIP): CCT + food assistance <u>Conditionalities:</u> Single parents who had received public assistance for 24 of the past 36 months were required to work at least 30 hours per week, or participate in employment and training activities to	Low-income single mothers	NR

Reference	Country	Study design, violence, tool/data source	Sample size	Intervention	Recipient	Transfer characteristics
				continue receiving their full grants		
<b>Cash for work</b>						
Ranganathan 2022b	Ethiopia	Randomised controlled trial Household survey IPV	196 villages and 13 districts 2,604 households	Productive Safety Net Programme (PSNP): Food or cash transfers for seasonal labour UCT to households whose main income earners are elderly or disabled. + Strengthened PSNP4 Institutions and Productive Safety Net Programme (PSNP) Development Food Security Activity: complementary livelihood (L), nutrition (N), gender and natural resource management activities. 4 treatment arms: <ul style="list-style-type: none"> <li>• T1 (L* + N*)</li> <li>• T2 (L* + N)</li> <li>• T3 (L + N*)</li> <li>• T4 control (PSNP only)</li> </ul> *L or N activities, plus	Poor, rural households	<u>Amount (PSNP):</u> daily wage rate (2019/2020) 41 Birr (exchange rate March 2020: \$1.26) in Oromia; 42 Birr (\$1.29) in Amhara, or 15 kgs of cereal/month <u>Frequency:</u> monthly
Betancourt 2020	Rwanda	Cluster-randomised controlled trial Observation of Mother-Child Interaction (OMCI); Home Observation for Measurement of the Environment (HOME); Multiple Indicator Cluster Survey (MICS) Family Care Indicators (FCI) IPV, child maltreatment	1,049 households	Rwanda's cash-for-work Vision Umurenge Programme (VUP): classic public works (cPW) or expanded public work (ePW) VUP (cPW or ePW) + Sugira Muryango (home-visiting early childhood development coaching programme)	Families living in extreme poverty, with at least one child aged between 6–36 months	NR

Reference	Country	Study design, violence, tool/data source	Sample size	Intervention	Recipient	Transfer characteristics
Barnhart 2020	Rwanda	Cluster - randomised controlled trial MICS Child Development and Child Disciplinary Modules Child maltreatment	41 children	VUP + Sugira Muryango (home-visiting early childhood development coaching programme)	Children and caregivers	NR
Ivaschenko 2017	Papua New Guinea	Randomised controlled trial Eligibility Baseline Survey (EBS), Eligibility Screening Survey (ESS), and follow-up Survey (FUS) Youth violence	743 individuals	Short-term (40 days) employment in public work Urban Youth Employment Project Conditionalities: 40 hours of basic life skills training at the start of the programme	Urban unemployed, out-of-school young people (aged 16 to 35)	NR
<b>Tax credit</b>						
Bullinger 2023	USA	Observational, cross-sectional Patient medical record review from the Children's Healthcare of Atlanta (referred to hereafter as Children's) system Child maltreatment	343 178 children	Child Tax Credit (CTC)	Families who filed a 2019 or 2020 tax return and claimed the CTC on the return or provided information to the Internal Revenue Service to get stimulus payments during the COVID-19 pandemic. Additionally, families must have lived in the US for more than half the year, have a child younger than 18 years at the end of 2021, and documented incomes below USD150,000	<u>Size</u> : up to 45% of a family's annual earnings <u>Frequency</u> : 1 lump sum payment
Xu 2022	USA	Observational, cross-sectional 5-item subscale of Conflict Tactics Scales Parent-Child (CTS-PC) Child	362 grandparent-headed kinship families	Foster care payments, kinship guardianship assistance payments, TANF	Kinship families	<u>Amount (Foster care payments)</u> : From USD555 to USD655 Kinship guardianship assistance payments: less than or equal to foster care payments



Reference	Country	Study design, violence, tool/data source	Sample size	Intervention	Recipient	Transfer characteristics
		maltreatment				<u>Frequency</u> (Foster care payments): monthly
Kovski 2022	USA	Quasi- experimental  State-level counts of child protective services (CPS) reports  Child maltreatment	48 states and the District of Columbia	EITC and CTC	Tax filers claiming the EITC or the refundable portion of the CTC	<u>Amount:</u> Average state- level per-child EITC and CTC refund: USD 1,467 per child
Moe 2022	USA	Observational, cohort  Youth respondent's survey  Youth violence	5,492 adolescents	Cumulative simulated EITC	Families	<u>Amount:</u> simulated amount of EITC received by each child's household between ages 0 and 14 years (2016 USD) 10,550 (SD 5,008; range: 697-28,394)
Dalve 2022	USA	Observational, cross-sectional  Youth Risk Behavior Surveillance System (YRBSS)  Youth violence	45 States	Refundable EITC	Taxpayers	NR
Morgan 2021	USA	Observational, cross-sectional  A national depression module in N. DUH  Suicide	51 States	Refundable state- level EITC	Working adults with children	<u>Amount:</u> variable, based on pretax earnings, marital status, and number of children in the household
Spencer 2020	USA	Cohort study  Mother's self- report of coercive control and emotional abuse	3,545 women	Earned Income Tax Credit (EITC), Temporary Assistance for Needy Families (TANF)	Families (for TANF), low-to moderate- income workers (for EITC)	NR
Klevens 2017	USA	IPV Observational, cross-sectional  State Inpatient Databases (SIDs) from the Healthcare Cost and	100,000 children	Refundable EITC	Low-income workers, especially those with children	<u>Amount:</u> In states with refundable EITCs, tax refunds ranged from USD108 to USD1,014 for a single parent

Reference	Country	Study design, violence, tool/data source	Sample size	Intervention	Recipient	Transfer characteristics
		Utilization Project (HCUP) Child maltreatment				working full-time at the minimum wage with 1 child, and between USD165 and USD1648 for a single parent working full-time at the minimum wage with 2 children. In states with non-refundable EITCs, tax savings ranged from <USD2 to USD189 for a single parent working full-time at the minimum wage with 1 child, and between \$0 and \$250 for a single parent working full-time at the minimum wage with 2 children.
<b>Start-up grant</b>						
Ozler 2020	Liberia	Cluster-randomised controlled trial Survey collecting data on sexual violence, schooling, SFH, psychosocial wellbeing, gender attitudes, life skills, and protective factors Youth violence	2,348 individuals	Empowerment of Girls (GE) GE: individual savings start-up, GE+: incentive payment to caregivers tied to girls + mentoring programme * GE was evaluated in isolation and combined with cash	Caregivers and adolescent girls	<u>Amount:</u> girls (individual savings start-up): \$2 /month, \$16 total; caregivers (participation incentive payment): \$1.25 for each of the 32 regular sessions that the girl attended (max \$40) <u>Size:</u> more than 10% of p.c. consumption in Liberia <u>Frequency:</u> Individual savings start-up - monthly; Participation incentive payment - per session
Ismayilova 2017	Burkina Faso	Cluster-randomised controlled trial Demographic Health Survey (DHS),	360 participants	Trickle Up (economic empowerment intervention) Trickle Up Plus (economic empowerment)	Ultra-poor female caregivers of children aged between 10- and 15	<u>Amount:</u> non-refundable seed grant of \$100 (50,000 West African CFA Francs at the time of

Reference	Country	Study design, violence, tool/data source	Sample size	Intervention	Recipient	Transfer characteristics
		Women's Status Module and Domestic Violence Module		intervention + family coaching component)		distribution) <u>Frequency</u> : one instalment
		IPV				
		Cluster- randomised controlled trial		Women's Income Generating Support (WINGS)	Ultra-poor	<u>Amount</u> :
Green 2015	Uganda	Subset of the 2006 Uganda Demographic and Health Survey	1,800 individuals	programme: Start- up grant plus skills training, follow-up support for women Women Plus (W+), partner included	women (aged between 14 and 30) with little formal education	USD150 (start- up grant) <u>Frequency</u> : 2 instalments
		IPV				

CT: Cash Transfer; CCT: Conditional Cash Transfer; UCT: Unconditional Cash Transfer; NR: Not Reported; NA: Not Available; p.c.: per capita; MW: minimum wage; ePW expanded public work

<sup>a</sup> Evaluated CCT/UCT and cash+ interventions.

Table 5. Critical findings

Reference	Violence outcome	Analysis method	Baseline of violence outcome	Results
<b>CCT or UCT</b>				
Machado 2022	Suicide	Average treatment effect on the treated (ATT) estimator, fitted Poisson models, incidence rate ratios (IRRs), inverse probability of treatment weighting (IPTW)	NA	<p>BFP beneficiaries had a lower suicide rate than nonbeneficiaries in all models. Three fewer suicide cases per 100,000 individuals among BFP beneficiaries, which is approximately a 50% decrease in the overall suicide rate. BFP beneficiaries had a 56% lower risk of suicide than non beneficiaries. Suicide rates, per 100,000 individuals (95% CI)</p> <ul style="list-style-type: none"> <li>• Original cohort Beneficiaries 5.4 (5.32-5.47), <math>p &lt; 0.001</math> Non beneficiaries 10.7 (10.51-10.87), <math>p &lt; 0.001</math></li> <li>• Matched cohort Beneficiaries 5.5 (5.44-5.61), <math>p &lt; 0.001</math> Non beneficiaries 11.1 (10.41-11.81), <math>p &lt; 0.001</math></li> </ul> <p>Estimated IRR (95% CI)</p> <ul style="list-style-type: none"> <li>• Unadjusted: 0.50 (0.49-0.52)</li> <li>• Unadjusted with IPTW: 0.43 (0.41-0.44)</li> <li>• Adjusted: 0.44 (0.43-0.45)</li> <li>• Adjusted model with ITPW: 0.44 (0.42-0.45)</li> </ul> <p>All <math>p &lt; 0.001</math> ATT: <math>-0.00003</math> (95% CI: <math>-0.00004, -0.00001</math>); <math>p &lt; 0.001</math></p>
Iqbal 2021	IPV: Emotional and physical	Regression discontinuity design	NA	<p>The intervention had no impact on reducing violence against women.</p> <ul style="list-style-type: none"> <li>• Physical violence in the last year: <math>-0.00</math> (SE 0.04)</li> <li>• Emotional violence in the last year: <math>-0.00</math> (SE 0.05)</li> <li>• Physical or emotional violence: <math>-0.00</math> (SE 0.05)</li> </ul> <p>All non-significant</p>
Carvalho 2021	Childhood violence: physical violence	Logistic regression (bivariate analysis) and stepwise backward	NA	<p>Cash transfer programs demonstrated protection of children and adolescents from violence OR 0.5 (95% CI: 0.3-0.9); <math>p = 0.015</math></p>
Borraz 2020	IPV: Physical, sexual, emotional, economic, or psychological, in action and in threat  General crime: assault and robbery	Poisson model, empirical model using a panel fixed effect regression	NA	<p>The programme reduces domestic violence by 1.6 percent. There is no relationship between programme beneficiaries and assault in the panel data fixed-effect regression model without controls and the model including controls. There is a positive relationship between programme beneficiaries and robberies in the panel data fixed-effect regression model without controls and in the model including controls.</p> <ul style="list-style-type: none"> <li>• Domestic violence, beneficiaries: Model 4: <math>-0.534</math> (SE 0.395), non-significant</li> <li>• Robbery beneficiaries: Model 4: <math>-1.716</math> (SE 0.997) significant at 5%</li> </ul>

Reference	Violence outcome	Analysis method	Baseline of violence outcome	Results
Leite 2020	IPV: Psychological and physical	Multigroup path analysis, modification Indices, Tucker-Lewis index	NA	Participation in Bolsa Familia had no association with physical violence and was only associated with psychological violence in families with a p.c. income above the poverty line. Psychological violence: coefficient (SE): 0.287 (0.087), $p=0.001$
Litwin 2019	Female homicide	Difference-in-differences analysis	Mean (SD) Female homicide count ages 15-49: 0.5 (2.0) Female homicide rate 15-49, per 100,000: mean 3.4 (9.5)	Null associations between Bolsa Familia and female homicide. Rate: 0.0015 (SE 0.0020; Adj R2 0.278) 0.0012 (SE 0.0023; Adj R2 0.277) -0.0004 (SE 0.0017; Adj R2 0.155)
Roy 2019 <sup>a</sup>	IPV: Emotional and physical  Child abuse	Intent-to-treat analysis using single-difference estimation	NA	Transfers only have no significant impact on emotional or physical IPV six to ten months after the programme had ended. Transfers+BCC cause a statistically significant reduction in physical violence, 26% decrease. Transfers+BCC cause a statistically significant reduction in “Harsh physical punishment last week” (12% decrease) in “Hit child back when child hits parent” (8% decrease). Transfers only have no significant impact. Transfer only <ul style="list-style-type: none"> <li>Emotional or physical: 0.02 (SE 0.04)</li> <li>Emotional: 0.03 (SE 0.04)</li> <li>Physical: 0.00 (SE 0.02)</li> </ul> All non-significant Transfer + BCC <ul style="list-style-type: none"> <li>Emotional or physical: -0.04 (SE 0.04), non-significant</li> <li>Emotional: -0.02 (SE 0.04), non-significant</li> <li>Physical: -0.07 (SE 0.03), <math>p&lt;0.05</math></li> </ul>
Christian 2019	Suicide	Difference-in-differences approach	Subdistricts in districts with a 10% larger share of the households below the poverty line have, on average, a 0.142 higher suicide rate per 100,000 people.	Rollout: receiving the cash transfer programme at an average of \$22.45 per year reduces the number of suicides per 100,000 inhabitants by 0.36. Rollout: Model 1: -0.358 (SE: 0.101); $p<0.01$ Randomised experiment: mean suicide rates between treatment and control subdistricts in 2011 yields an insignificant average decrease of 0.258 suicides per 100,000. Randomised experiment: Model 3 (baseline difference-in-differences specification using data from 2005 and 2011): -0.665 (SE: 0.318); $p<0.05$ Model 4 (clustering standard errors at the district level): -0.665 (SE: 0.266); $p<0.05$ Model 5 (including data from the 2003 and 2000 census waves): -0.466 (SE: 0.334); non-significant Model 6 (including subdistrict-specific time trends on top of subdistrict and time fixed effects): -1.064 (SE: 0.593);

Reference	Violence outcome	Analysis method	Baseline of violence outcome	Results
				p<0.10 Model 7 (ANCOVA specification from model 1 without population weights): -0.474 (SE: 0.325); non-significant
Kilburn 2018	IPV: Sexual and physical	Intention-to-treat analysis, generalised estimating equation models, risk ratios	Ever physical IPV: treatment group 18%, control group 16% Ever forced sex: treatment group 2.7%, control group 3.3% Any physical IPV in past 12 months: treatment group 11%, control group 10%	Significant reduction in physical IPV. Young women in the treatment group have a 34% lower risk of IPV. Any physical IPV: treatment 18.5%, control 27.8%, RR 0.66 (95% CI: 0.59–0.74), p<0.001 No effect on forced sex (treatment 2.5%, control 2.2%, RR 1.13 [95% CI: 0.75–1.70])
Machado 2018	General violence: Homicide (male and female)	Multivariable negative binomial regression models, difference-in-difference models	Homicide rate in 2004 mean (SD) 14.45 (0.25)	Increases in Bolsa Familia coverage in the target population associated with homicide rates decreased by 0.3%. Rate Ratio: 0.997; 95% CI: 0.996–0.997
Alves 2018	Suicide	Negative binomial regression models with fixed effects	NA	Suicide rates significantly lower in municipalities with 30-70% coverage (RR crude: 0.966; 95% CI: 0.960–0.972) and >70% (RR crude: 0.942; 95% CI: 0.936–0.947), compared with low coverage municipalities (<30%).
Chioda 2016	General violence: Robberies, thefts, violent crimes, vandalism, and drug crimes	OLS, instrumental variable analysis, log-Poisson and negative binomial models	Mean (SD) All crimes: 634.2 (761.5) Robberies 433.5 (530.1) Thefts 55.6 (SD 139.4) Violent Crimes 126.2 (104.8) Vandalism 11.4 (15.5) Drug crimes 2.5 (9.6)	Expansion of Bolsa Familia to 16 and 17 year-olds after 2008 caused a 6.5% reduction in crime in school neighbourhoods (41 fewer crimes per school per year, SD 5.4%), or 2.1 fewer crimes per year per additional student covered per year. Estimates, effect of Bolsa Familia on crime. Model 1: OLS without controls or fixed effect; model 2: OLS with controls; model 3: OLS with controls and fixed effect; model 4: reduced-form; model 5: instrumental variable with controls and fixed effect <ul style="list-style-type: none"> <li>• All crimes, robberies and violent crimes: significant reduction in all models</li> <li>• Thefts: significant reduction in models 1, 2 and 3; non-significant effect in models 4 and 5</li> <li>• Vandalism: significant reduction in models 1 and 2; non-significant effect on models 3, 4 and 5</li> <li>• Drug crimes: significant reduction in models 1, 2, 4 and 5; non-significant effect on model 3</li> </ul>
Meloni 2014	General violence: Property crimes, larceny, robbery,	Panel data, robustness check by OLS	NA	A 10% increase in the number of UHHP recipients decreases the total crime rate by 2.1%, and property crimes by 2.7%.

Reference	Violence outcome	Analysis method	Baseline of violence outcome	Results
	aggravated assault, and murder			<p>Robbery and larceny showed the highest response to welfare spending, at 3.14% and 3.09%, respectively.</p> <p>Elasticity of each type of crime with respect to relief spending:</p> <ul style="list-style-type: none"> <li>• Total crime -0.206</li> <li>• Property crime -0.267</li> <li>• Robbery -0.314</li> <li>• Larceny -0.309</li> <li>• Aggravated assault -0.247</li> </ul>
Abu-Hamad 2014	Child abuse: Physical violence against children at home	Univariate and bivariate statistics	NA	<p>Intervention has no effect on physical violence against children.</p> <p>Caregivers reporting disciplining child by:</p> <ul style="list-style-type: none"> <li>• Not allowing him/her to leave the house: intervention 43.5%, control 46%</li> <li>• Shocking: intervention 47.6%, control 52.0%</li> <li>• Yelling/shouting: intervention 60.6%, control 65.8%</li> <li>• Slapping him/her with a bare hand or object: intervention 41%, control 48.9%</li> <li>• Calling him/her dumb/lazy: intervention 33.4%, control 38.8%</li> </ul> <p>All non-significant</p>
Rosenberg 2014	Violence against adolescents: Transactional sex	Logistic regression models	Control group, transactional sex Women: 25.4 % Men: 5.5 %	<p>Intervention has no effect on transactional sex.</p> <p>Women: OR 0.65 (95% CI: 0.30-1.42) Wald <math>\chi^2</math> statistic: 1.18; p=0.28 Men: OR 0.96 (95% CI: 0.27-3.40) Wald <math>\chi^2</math> statistic: &lt;0.01; p=0.95</p>
Hidrobo 2013	IPV: Physical and emotional	z-scores, in-treatment analysis, differential effect, linear probability models	Means <i>Physical violence</i> control 0.30, treatment 0.27, p=0.52 <i>Emotional violence</i> control 0.56, treatment 0.52, p=0.42 <i>Controlling behaviours</i> control 0.57, treatment 0.55, p= 0.71	<p>Being in the treatment group does not affect emotional and physical violence, and there is a significant, negative impact on controlling behaviours.</p> <p>Average effect of the BDH on domestic violence (SE) (treatment effect added controls variables)</p> <ul style="list-style-type: none"> <li>• Emotional: -0.02 (0.03), non-significant</li> <li>• Controlling: -0.06 (0.03), p&lt;0.05</li> <li>• Physical: -0.02 (0.03), non-significant</li> </ul> <p>BDH leads to a significant decrease in the probability that a partner does not allow his wife or partner to see her friends or family; and a marginally significant decrease in the probability that a partner does not allow his wife or partner to study or work.</p> <p>Average effect of the BDH on psychological violence (SE):</p> <ul style="list-style-type: none"> <li>• Does not allow you to see friends or family -0.006 (0.02), p&lt;0.01;</li> <li>• Does not allow you to study or work -0.05 (0.03), p&lt;0.10</li> <li>• Ignores you -0.04 (0.03), non-significant</li> <li>• Yells at you -0.03 (0.03), non-</li> </ul>

Reference	Violence outcome	Analysis method	Baseline of violence outcome	Results
				<p>significant</p> <ul style="list-style-type: none"> <li>Tells you that you are worthless 0.03 (0.03), non-significant</li> <li>Threatens to leave 0.03 (0.03), non-significant</li> <li>Threatens to take the children 0.03 (0.02), non-significant</li> </ul>
Cluver 2013	Violence against adolescents: Physical violence against children at home	Univariate and bivariate statistics	NA	<p>For adolescent girls, receipt of a cash transfer was associated with reduced incidence of transactional sex (adjusted odds ratio [OR] 0.49, 95% CI 0.26–0.93; <math>p=0.028</math>), and age-disparate sex (AOR 0.29, 95% CI 0.13–0.67; <math>p=0.004</math>). For boys (<math>n=1475</math>), no consistent effects were shown for any of the behaviours.</p>
<b>Cash+</b>				
Jocson 2023	Child maltreatment: overall, physical and emotional abuse IPV and coercion	Wilcoxon signed-rank tests	<p>Mean (SD)</p> <p>Caregiver-report outcomes</p> <ul style="list-style-type: none"> <li>Overall child maltreatment: 14.53 (15.27)</li> <li>Physical abuse: 6.13 (7.75)</li> <li>Emotional abuse: 3.43 (4.98)</li> <li>Neglect: 0.77 (1.36)</li> <li>IPV: 1.55 (2.70)</li> <li>Coercion: 9.70 (12.31)</li> </ul> <p>Adolescent-report outcomes</p> <ul style="list-style-type: none"> <li>Overall child maltreatment: 12.40 (12.74)</li> <li>Physical abuse: 5.17 (7.17)</li> <li>Emotional abuse: 7.23 (7.53)</li> <li>Neglect: 4.73 (6.14)</li> <li>Exposure to community violence: 5.83 (4.80)</li> </ul>	<p>Caregiver and adolescent reports of child maltreatment and physical abuse significantly decreased.</p> <p>Caregiver-report outcomes</p> <p>Mean (SD), z score, <math>p</math>-value, <math>d</math></p> <ul style="list-style-type: none"> <li>Overall child maltreatment: 10.17 (12.79), -2.29, 0.022, -0.46</li> <li>Physical abuse: 3.80 (6.82), -2.43, 0.015, -0.39</li> <li>Emotional abuse: 6.37 (7.11), -1.91, 0.057, -0.36, non-significant</li> <li>Neglect: 0.67 (1.63), -0.42, 0.677, 0.11, non-significant</li> <li>IPV: 1.72 (2.93), -0.26, 0.798, 0.12, non-significant</li> <li>Coercion: 8.67 (13.38), -1.30, 0.195, -0.17, non-significant</li> </ul> <p>Adolescent-report outcomes</p> <ul style="list-style-type: none"> <li>Overall child maltreatment: 6.07 (7.31), -2.86, 0.004, -0.45</li> <li>Physical abuse: 2.03 (2.95), -2.64, 0.008, -0.48</li> <li>Emotional abuse: 4.03 (5.30), -2.44, -0.015, -0.38</li> <li>Neglect: 2.60 (4.97), -1.23, 0.019, -0.28</li> <li>Exposure to community violence: 4.77 (4.44), 0.99, 0.325, 0.17, non-significant</li> </ul>
Ranganathan 2022a	Transactional sex amongst adolescent girls and young women (AGYW)	Linear regression model (covariance-ANCOVA)	Baseline transactional sex experience: coefficient 0.38 (SE 8.30); $p<0.01$	The cash plus intervention showed no impacts on reducing transactional sex. Treatment (cash plus village): coefficient $\beta$ 0.003 (SE 0.07); $p=0.905$
Naledi 2022	IPV	Logistic regression models	<p>All phases, all arms</p> <p>Gender-based threats or violence (GBV): 1,038 (20.3%); <math>p&lt;0.001</math></p> <p>Forced sex ever: 675 (13.2%); <math>p&lt;0.001</math></p> <p>Transactional sex ever: 760 (14.9%); <math>p&lt;0.002</math></p>	<p>IPV indicators reduced immediately after WoW, but this was not durable. At the end of WoW, OR (95% CI)</p> <ul style="list-style-type: none"> <li>GBV threat: 0.53 (0.41-0.69)</li> <li>Forced sex: 0.37 (0.27-0.52)</li> <li>Transactional sex: 0.50 (0.37-0.66)</li> </ul> <p>All <math>p&lt;0.001</math></p> <p>At follow up, OR (95% CI)</p> <ul style="list-style-type: none"> <li>GBV threat: 0.99 (0.76-1.30); <math>p=0.964</math></li> <li>Forced sex: 0.75 (0.50-1.11);</li> </ul>



Reference	Violence outcome	Analysis method	Baseline of violence outcome	Results
				p=0.152 <ul style="list-style-type: none"> <li>Transactional sex: 0.83 (0.63-1.10); p=0.200</li> </ul>
Palermo 2021	Violence experiences (emotional, physical, sexual), and perpetration among adolescents	Ordinary least squares, linear probability models, average-treatment-on-the-treated estimates	Experiences of violence Emotional: full sample 35%; cash plus 31%; CCT/UCT 39% Physical: full sample 27%; cash plus 25%; CCT/UCT 30% Sexual: full sample 1%; cash plus 1%; CCT/UCT 1%	The plus intervention reduced female participants' experiences of sexual violence by 5 percentage points and male participants' perpetration of physical violence by 6 percentage points. There were no intervention impacts on emotional violence or physical violence. Intervention Effects (Intent-to-Treat), experiences of violence (95% CI): <ul style="list-style-type: none"> <li>Emotional violence: b -0.05 (-0.11, 0.02)</li> <li>Physical violence: b -0.01 (-0.06, 0.03)</li> <li>Sexual violence: b -0.03 (-0.06, 0.00)</li> <li>Emotional, physical, or sexual violence: b -0.05 (-0.12, 0.02)</li> <li>Perpetrated emotional violence: b -0.02 (-0.05, 0.02)</li> <li>Perpetrated physical violence: b -0.03 (-0.06, 0.00)</li> </ul> Male and females participants, experiences of violence (95% CI): <ul style="list-style-type: none"> <li>Emotional violence: b -0.07 (-0.16, 0.01) and b -0.01 (-0.11, 0.09)</li> <li>Physical violence: b -0.01 (-0.07, 0.05) and b 0.00 (-0.06, 0.06)</li> <li>Sexual violence: b -0.03 (-0.07, 0.01) and b -0.05 (-0.10, 0.00)</li> <li>Perpetrated emotional violence: b -0.01 (-0.05, 0.03) and b -0.02 (-0.08, 0.03)</li> <li>Perpetrated physical violence: b -0.06 (-0.10, -0.02) and b 0.01 (-0.03, 0.06)</li> </ul>
Lachman 2021	Child maltreatment, IPV	Intention-to-treat, linear regression analyses, negative binomial models, incident risk ratios (IRRs)	Child maltreatment, FDA vs MaPa: Total maltreatment-frequency, M (SD): 13.26 (13.80) vs 14.07 (15.5) Physical abuse-incidence, n (%): 89 (74.2) vs 43 (71.7) Emotional abuse-incidence, n (%): 112 (93.3) vs 57 (95.0) Neglect-incidence, n (%): 56 (46.7) vs 21 (35.0) All non-significant	Adults receiving the MaPa programme reported less overall maltreatment, emotional abuse, and neglect effects, sustained at one-year follow-up. Parents allocated to the MaPa programme reported a 63% reduced risk of IPV victimhood at one-month post-intervention (IRR = 0.37, 95%CI [0.06,0.68]) with 49% reduced risk at one-year follow-up (IRR = 0.51, 95%CI [0.01,1.00]). Primary outcomes, controlling for baseline scores, child age, and child sex, at 6 months post-baseline (post-intervention) and 18 months post-baseline (follow-up, 12 months post-intervention): <ul style="list-style-type: none"> <li>Overall maltreatment (Log) Post-intervention: intervention 0.73 (SD 0.34); control 0.96 (SD 0.44); beta = -0.24; unstandardized b = -0.20 (95%CI: = -0.31, -0.09); p=0.000; effect size d: =</li> </ul>

Reference	Violence outcome	Analysis method	Baseline of violence outcome	Results
				<p>0.50 (95%CI: -0.86, -0.13)                      Follow-up: intervention 0.77 (SD 0.37); control 0.93 (SD 0.39); beta -0.19; unstandardized b -0.14 (95%CI: -0.35, -0.03); p=0.026; effect size d: -0.39 (95%CI: -0.75, -0.03)</p> <ul style="list-style-type: none"> <li>Emotional abuse (Log)                              Post-intervention: intervention 0.55 (SD 0.32); control 0.76 (SD 0.36); beta -0.28; unstandardized b -0.20 (95% CI: -0.31, -0.09); p&lt;0.001; effect size d: -0.59 (95% CI: -0.95, -0.22)                              Follow-up: intervention 0.56 (SD 0.34); control 0.69 (SD 0.36); beta -0.18; unstandardized b -0.13 (95% CI: -0.24, -0.02); p=0.026; effect size d: -0.37 (95% CI: -0.73, -0.01)</li> <li>Physical abuse                              Post-intervention: intervention 1.36 (SD 2.07); control 3.64 (SD 5.49); beta -0.42; unstandardized b -0.68 (95% CI: -1.17, -0.20); p=0.005; effect size IRR: 0.51 (95% CI: 0.26, 0.75)                              Follow-up: intervention 1.98 (SD 3.16); control 3.30 (SD 4.57); beta -0.32; unstandardized b -0.30 (95% CI: -0.81, 0.21); p=0.245; effect size IRR: 0.74 (95% CI: 0.36, 1.12)</li> <li>Neglect                              Post-intervention: intervention 1.22 (SD 2.41); control 2.79 (SD 4.87); beta -0.58; unstandardized b -0.66 (95% CI: -1.30, -0.01); p=0.046; effect size IRR: 0.52 (95% CI: 0.18, 0.85)                              Follow-up: intervention 1.39 (SD 2.69); control 2.37 (SD 4.05); beta -0.38; unstandardized b -0.53 (95% CI: -1.15, 0.09); p=0.093; effect size IRR: 0.59 (95% CI: 0.23, 0.95)</li> </ul>
Austrian 2021	Violence against adolescents: Experienced violence by a male	Analysis of covariance, intent-to-treat using longitudinal data, OLS and linear probability models for binary outcomes	Experienced violence by a male in the past year (%) Kibera and Wajir study sites: Violence (V only): 29 and 4.1 V+ Education (E): 29.8 and 3.9 V+E+Health (H): 30.6 and 3.1 V+E+H+Wealth creation (W): 32.2 and 2.2	<p>The educational (E) component that includes a conditional cash transfer significantly reduced violence when compared with the V only arms in Kibera.</p> <p>Experienced violence by a male in the past year (95%CI), ITT estimates:</p> <p>Kibera</p> <ul style="list-style-type: none"> <li>VE vs V only: -0.088 (-0.14, -0.03), significant at 1%</li> <li>VEH vs V only: -0.059 (-0.12, 0.00), significant at 5%</li> <li>VEHW vs V only: -0.042 (-0.10, 0.02), non-significant</li> </ul> <p>Wajir</p> <ul style="list-style-type: none"> <li>VE vs V only: -0.006 (-0.04, 0.03), non-significant</li> <li>VEH vs V only: 0.015 (-0.02, 0.05), non-significant</li> <li>VEHW vs V only: -0.022(-0.05, 0.01), non-significant</li> </ul>
Briaux 2020	IPV: Controlling behaviour, and	Difference-in-differences,	Control vs intervention: Emotional	Women receiving CTs had lower odds of having experienced physical violence

Reference	Violence outcome	Analysis method	Baseline of violence outcome	Results
	emotional or physical violence	linear regression models, logistic regression; percentage points; relative odds ratio; and intention-to-treat	IPV (%): 55.1 vs 51.4; Physical IPV (%): 26.9 vs 28.1; Controlling behaviour (%) 72.5 vs 69.1	<p>than non-beneficiaries.</p> <ul style="list-style-type: none"> <li>Physical IPV (DD = -7.9 pp, ROR: 0.60, 95% CI: 0.36–0.99, p=0.048)</li> <li>Controlling behaviour (DD = -2.3 pp, ROR: 0.93, 95% CI: 0.64–1.35, p=0.686)</li> <li>Emotional violence (DD = -3.6 pp, ROR: 0.8.3, 95% CI: 0.56–1.25, p=0.374)</li> <li>Proportion of women humiliated by their partner (DD = -6.4 pp, ROR: 0.61, 95% CI: 0.39–0.96, p=0.031)</li> </ul>
Chakrabarti 2020	Youth violence: Physical violence (parent/adult relative, boyfriend/girlfriend/intimate partner), authoritative figure (teacher/religious leader/community leader), peer/classmate, or other actor (for example, stranger)	Non-experimental impact evaluation, difference-in-differences, linear probability models, single difference model, and multinomial logit models	Physical violence: control 44%; intervention 49% Severe physical violence: control 23%; intervention 25% Slapped/pushed: control 37%; intervention 41% Hit with fist/kicked/beaten with object: control 21%; intervention 23% Attacked or threatened with knife/other weapon: control 3%; intervention 5%	<p>Results demonstrate a 19% decline in the incidence of physical violence among young people, four years into the programme.</p> <ul style="list-style-type: none"> <li>Physical violence: 12-month treatment impact 0.041 (0.061), non-significant 48-month treatment impact -0.189 (0.062), p&lt;0.01</li> <li>Severe physical violence: 12-month treatment impact: 0.006 (0.056) 48-month treatment impact: -0.109 (0.067)</li> <li>All non-significant</li> <li>Slapped/pushed: 12-month treatment 0.075 (0.062), non-significant 48-month treatment impact -0.141 (0.049), p&lt;0.01</li> <li>Hit with a fist/kicked/beaten with an object: 12-month treatment impact 0.007 (0.052) 48-month treatment impact -0.102 (0.068)</li> <li>All non-significant</li> <li>Attacked/ threatened with a knife/other weapon: 12-month treatment impact -0.005 (0.021), non-significant 48-month treatment impact -0.042 (0.022), p&lt;0.1</li> <li>Young person has seen parent being subjected to IPV at some point in time: 48-month treatment impact -0.038 (0.014), p&lt;0.01</li> </ul>
Heath 2020	IPV: emotional, physical, and controlling behaviours  Child abuse	Intent-to-treat analysis using single difference estimation with midline data	IPV Monogamous households Any physical violence on index mother, last 12 months: mean control group: 0.22; mean intervention group: 0.24; p-value: 0.68  Any emotional	<p>IPV</p> <p>The Jigisémèjiri programme produces significant decreases in IPV in polygamous households, where physical violence decreases by 7.2%, emotional violence by 12.6%, and controlling behaviours by 16.1%, but has limited effects in monogamous households.</p> <p>Overall effect on IPV</p> <ul style="list-style-type: none"> <li>Any physical violence: -0.029 (SE 0.027); non-significant</li> <li>Any emotional violence: -</li> </ul>

Reference	Violence outcome	Analysis method	Baseline of violence outcome	Results
			<p>violence on index mother, last 12 months: mean control group: 0.29; mean intervention group: 0.36; p-value: 0.18</p> <p>Any controlling behaviour on index mother, last 12 months: mean control group: 0.67; mean intervention group: 0.58; p-value: 0.10</p> <p>Polygamous households</p> <p>Any physical violence on index mother, last 12 months: mean control group: 0.18; mean intervention group: 0.27; p-value: 0.18</p> <p>Any emotional violence on index mother, last 12 months: mean control group: 0.21; mean intervention group: 0.44; p-value: 0.02</p> <p>Any controlling behaviour on index mother, last 12 months: mean control group: 0.56; mean intervention group: 0.68; p-value: 0.04</p> <p>Child maltreatment: NR</p>	<p>0.061 (SE 0.035); p&lt;0.1</p> <ul style="list-style-type: none"> <li>Any controlling behaviour: -0.060 (SE 0.032); p&lt;0.1</li> </ul> <p>Effect on monogamous households</p> <ul style="list-style-type: none"> <li>Any physical violence: -0.006 (SE 0.029)</li> <li>Any emotional violence: -0.027 (SE 0.036)</li> <li>Any controlling behaviour: -0.007 (SE 0.048)</li> </ul> <p>All non-significant</p> <p>Effect on polygamous households</p> <ul style="list-style-type: none"> <li>Any physical violence: -0.072 (SE 0.036); p&lt;0.05</li> <li>Any emotional violence: -0.126 (SE 0.048); p&lt;0.05</li> <li>Any controlling behaviour: -0.161 (SE 0.045); p&lt;0.01</li> </ul> <p>Difference between monogamous vs. polygamous</p> <ul style="list-style-type: none"> <li>Any physical violence: -0.067 (SE 0.035); p&lt;0.1</li> <li>Any emotional violence: -0.099 (SE 0.047); p&lt;0.05</li> <li>Any controlling behaviour: -0.153 (SE 0.067); p&lt;0.05</li> </ul> <p>Child maltreatment</p> <p>Overall effect</p> <ul style="list-style-type: none"> <li>Any psychological aggression: -0.044 (SE 0.035); non-significant</li> <li>Any physical punishment: -0.066 (SE 0.036); p&lt;0.1</li> <li>Number of psychological and physical violent acts (0–8): -0.334 (SE 0.134); p&lt;0.05</li> </ul> <p>Effect on monogamous households</p> <ul style="list-style-type: none"> <li>Any psychological aggression: 0.006 (SE 0.042)</li> <li>Any physical punishment: 0.005 (SE 0.050)</li> <li>Number of psychological and physical violent acts (0–8): -0.144 (SE 0.170)</li> </ul> <p>All non-significant</p> <p>Effect on polygamous households</p> <ul style="list-style-type: none"> <li>Any psychological aggression: -0.114 (SE 0.060); p&lt;0.1</li> <li>Any physical punishment: -0.167 (SE 0.048); p&lt;0.01</li> <li>Number of psychological and physical violent acts (0–8): -0.596 (SE 0.241); p&lt;0.05</li> </ul> <p>Difference between monogamous vs. polygamous</p> <ul style="list-style-type: none"> <li>Any psychological aggression: -0.121 (SE 0.074); non-significant</li> <li>Any physical punishment: -0.172 (SE 0.068); p&lt;0.05</li> </ul> <p>Number of psychological and physical violent acts (0–8): -0.452 (SE 0.303); non-significant</p>
Canedo	IPV: physical and/or	Propensity	Prevalence of IPV,	Unemployed plus cash transfer women

Reference	Violence outcome	Analysis method	Baseline of violence outcome	Results
2019	sexual	Score Matching and Inverse-Probability-Weighted Regression Adjustment	over 15 years of age: 43.9%	<p>experienced a statistically significant increase in physical and/or sexual IPV in urban settings. In both urban and rural settings, statistically significant increase in the prevalence of IPV for the employed plus cash transfer women category (7% and 8%, respectively). Propensity scores matching estimates</p> <ul style="list-style-type: none"> <li>Sexual or physical, urban areas:           <p>Worked during the last year: 0.036 (0.005); p&lt;0.001</p> <p>Received CCT: 0.029 (0.011); p&lt;0.01</p> <p>Worked and received CCT: 0.089 (0.017); p&lt;0.001</p> </li> <li>Sexual or physical, rural areas:           <p>Worked during the last year: 0.064 (0.013); p&lt;0.001</p> <p>Received CCT: 0.008 (0.012); non-significant</p> <p>Worked and received CCT: 0.106 (0.022); p&lt;0.001</p> </li> </ul>
Hsu 2017	IPV: intimidation and assault	Negative binomial regression models with fixed effects	Daily Number of Offences/100 000 People Male on female, mean (SD) Intimidation: 0.05 (0.00) Assault: 0.47 (1.04)	<p>More females report IPV within 4 days of receiving welfare transfers. Incidence Rate Ratio (SE)</p> <p>Within 4 days of receiving welfare transfers</p> <ul style="list-style-type: none"> <li>Intimidation: 1.046 (0.011); p&lt;0.01</li> <li>Assault: 1.007 (0.004); p&lt;0.1</li> </ul> <p>Receiving days 30, 31, 1</p> <ul style="list-style-type: none"> <li>Intimidation: 1.139 (0.032); p&lt;0.01</li> <li>Assault: 1.004 (0.007); non-significant</li> </ul> <p>Receiving days 14-16</p> <ul style="list-style-type: none"> <li>Intimidation: 1.021 (0.015); non-significant</li> <li>Assault: 0.996 (0.006); non-significant</li> </ul>
Hidrobo 2016	IPV: emotional violence, controlling behaviour, physical and sexual violence	Intent-to-treat analysis, probit models	Means Lifetime physical and/or sexual violence: All 0.35, control 0.33, treatment 0.35, p=0.64 Controlling behaviours: All 0.17, control 0.17, treatment 0.17, p=0.87 Emotional violence: All 0.26, control 0.24, treatment 0.27, p=0.36 Physical and/or sexual violence: All 0.16, control 0.12, treatment 0.18, p=0.05	<p>Significant impact leading to controlling behaviours and physical and/or sexual violence.</p> <p>Intent to treat estimates, with a full set of extended control variables.</p> <ul style="list-style-type: none"> <li>Controlling behaviours -0.08 (SE 0.04)</li> <li>Emotional violence -0.05 (SE 0.04)</li> <li>Physical and/or sexual violence -0.05 (SE 0.03)</li> </ul>
Cluver 2016	Violence against adolescents: Sexual violence and exploitation of girls (sexual abuse, rape, transactional sexual exploitation, age-disparate sex and adolescent violence)	Multivariate logistic regression, testing for interactions between social protection and socio-demographic	Violent perpetration Girls: 9.3% Boys: 13.9% Past-year sexual violence Girls: 10.1% Boys: 5.9% Self-reported violent perpetration	<p>Amongst girls</p> <p>Cash social protection was significantly associated with reduced sexual exploitation: OR 0.67 (95% CI: 0.48–0.93)</p> <p>Caring social protection was significantly associated with reduced sexual exploitation: OR 0.71 (95% CI: 0.52–0.98)</p>

Reference	Violence outcome	Analysis method	Baseline of violence outcome	Results
	perpetration)	covariates, and marginal effects models	Girls 9.3% Boys: 13.9%	Amongst boys Cash social protection was significantly associated with reduced violent perpetration (OR 0.67; 95% CI: 0.48–0.93) Caring social protection was significantly associated with reduced violent perpetration (OR 0.59; 95% CI: 0.43–0.81)
Bobonis 2013	IPV: physical, sexual, and emotional abuse	OLS estimates of the average treatment effect	NA	Beneficiary women were 40 percent less likely to be victims of physical abuse, and were more likely to receive violent threats with no associated abuse. Physical or sexual violence: reduction in incidence by 8.2 percentage points (significant at the 90% confidence level) Physical abuse: reduction of 5.5 percentage points, or 43 percentage points (significant at the 90% confidence). Sexual abuse: reduction of 5.0 percentage points (51%), non-significant Threats of abuse: increase of 1.8 percentage points (23%), non-significant Emotional abuse: increase of 2.7 percentage points (32%), non-significant
Cancian 2013	Child abuse	Multivariate logistic regressions	NA	A full child support pass-through, compared to a partial pass-through, reduces the risk of the child maltreatment Model 1: OR 0.892 (SE 0.048) Model 2: OR 0.879 (SE 0.048) Model 3: OR 0.881 (SE 0.050) All significant at 5%
Gennetian 2003	IPV: psychological, physical and sexual	Regression, using ordinary least squares	MFIP impact on domestic abuse in the past year Long-term recipients: Any abuse: -3.3 Any nonphysical IPV: -3.3 Physical IPV: -2.4 Sexual IPV: 0.2 All non-significant Recent applicants: Any IPV: 2.3 Any nonphysical IPV: 2.9 Physical IPV: -2.4 Sexual IPV: -1.7 All non-significant	MFIP had no statistically significant effect on any of the domestic abuse outcomes for single-mother recipients. MFIP impact on domestic abuse over a 3-year follow-up period Long-term recipients: Any abuse: -4.9; non-significant Recent applicants: Any abuse: -1.0; non-significant
<b>Cash for work</b>				
Ranganathan 2022b	IPV: emotional, physical, sexual Controlling behaviours	Ordinary Least Squares regression	Experienced violence in the past 13 months, mean (SD): Emotional: T1 0.109 (0.312), p=0.351; T2 0.131 (0.338), p=0.802; T3 0.146 (0.354), p=0.847; control 0.139 (0.347) Physical: T1 0.071	No impacts of the complementary programming on IPV in the full sample, but some impacts among the poorest sample. Estimates from the SPIR midline survey sample, experience of past year IPV: <ul style="list-style-type: none"> <li>Emotional violence (SE): T1 -0.005 (0.024); T2 -0.006 (0.024); T3 -0.009 (0.025); T4 (control), mean: 0.122</li> </ul>

Reference	Violence outcome	Analysis method	Baseline of violence outcome	Results
			(0.258), p=0.768; T2 0.082 (0.275), p=0.425; T3 0.067 (0.250), p=0.934; control 0.065 (0.247) Sexual: T1 0.046 (0.210), p=0.629; T2 0.041 (0.199), p=0.843; T3 0.030 (0.172), p=0.643; control 0.038 (0.192) <i>p-value for T vs control</i>	<ul style="list-style-type: none"> <li>Physical violence (SE): T1 - 0.001 (0.019); T2 -0.017 (0.019); T3 -0.017 (0.018); T4 (control), mean: 0.092</li> <li>Sexual violence (SE): T1 - 0.016 (0.014); T2 -0.018 (0.014); T3 -0.005 (0.014); T4 (control), mean: 0.054</li> </ul> <p>All non-significant</p> <p>Estimates from the SPIR midline survey sample, extremely poor households, L* sample, receiving cash or poultry grant, experience of past year IPV:</p> <ul style="list-style-type: none"> <li>Emotional violence (SE): T1 x Poultry -0.016 (0.045); T1 x Cash 0.030 (0.043); T2 x Poultry 0.009 (0.053); T2 x Cash -0.047 (0.039); T3 - 0.016 (0.034); linear combination, effect of T1 0.005 (0.013); linear combination, effect of T2 - 0.022 (0.038); linear combination, effect of poultry -0.004 (0.039); linear combination, effect of cash - 0.013 (0.033); T4 (control), mean 0.125</li> </ul> <p>All non-significant</p> <ul style="list-style-type: none"> <li>Physical violence (SE): T1 x Poultry -0.053* (0.031); T1 x Cash 0.031 (0.036); T2 x Poultry -0.016 (0.042); T2 x Cash -0.059** (0.027); T3 - 0.027 (0.027); linear combination, effect of T1 - 0.013 (0.026); linear combination, effect of T2 - 0.041 (0.030); linear combination, effect of poultry -0.035 (0.030); linear combination, effect of cash - 0.019 (0.026); T4 (control), mean 0.106</li> </ul> <p>*p&lt;0.1; **p &lt; 0.05</p> <ul style="list-style-type: none"> <li>Sexual violence (SE): T1 x Poultry -0.027 (0.023); T1 x Cash -0.015 (0.024); T2 x Poultry -0.057*** (0.021); T2 x Cash -0.034 (0.021); T3 - 0.013 (0.022); linear combination, effect of T1 0.020 (0.019); linear combination, effect of T2 - 0.047**(0.020); linear combination, effect of poultry -0.042** (0.019); linear combination, effect of cash - 0.026 (0.019); T4 (control), mean 0.072</li> </ul> <p>**p &lt; 0.05; ***p &lt; 0.01</p> <p>Estimates from the SPIR midline survey sample, controlling behaviours by husband (SE): T1 0.026 (0.043); T2 -</p>

Reference	Violence outcome	Analysis method	Baseline of violence outcome	Results
				0.004 (0.035); T3 -0.026 (0.039); T4 (control), mean 0.500 All non-significant
Betancourt 2020	IPV: emotional, physical, and sexual abuse Child abuse: Parental behaviour towards the child/ family violence	Difference-in-differences, intent to treat, linear mixed models, and generalised linear mixed models with a logit link	Children, Any violent punishment Sugira Muryango + cPW: 47.7%, cPW only 47.0%, Sugira Muryango + ePW 48.0%, ePW only 41.8%. Caregivers: Maternal victimisation violence, last 3 months: Sugira Muryango + cPW 39.8%, cPW only 35.3%, Sugira Muryango + ePW 29.4%, ePW only 36.6% Paternal perpetration violence, last 3 months: Sugira Muryango + cPW 21.2%, cPW only 22.3%, Sugira Muryango + ePW 23.3%, ePW only 12.5%	Sugira Muryango associated with 51% decrease in the odds of females reporting victimisation to IPV (coefficient = -0.72, 95% CI: -1.43, -0.01); OR = 0.49, 95% CI: 0.24, 1.00). No intervention related differences in changes in fathers reporting IPV perpetration. Odds of exposure to harsh discipline decreased 70% more in families receiving Sugira Muryango, compared to UC children (coefficient = -1.22, 95% CI: -1.67, -0.76; OR = 0.30, 95% CI: 0.19, 0.47). Odds of being exclusively exposed to non-violent forms of discipline increased 2.5 more for children in Sugira Muryango families, compared to UC (coefficient = 0.92, 95% CI: 0.16, 1.68; OR = 2.50, 95% CI: 1.17, 5.34).
Barnhart 2020	Child abuse: Children's exposure to violent disciplinary practices	Linear mixed-effect models; generalised linear mixed models with a logit link and binomial distribution, discrete indicators and Wald tests	Violent disciplinary practices: intervention 63% (95% CI: 33-86); control: 78% (95% CI: 49-93)	Sugira Muryango children experienced marginally significant reductions in exposure to violent disciplinary methods. Violent disciplinary practices Intervention: end line 32% (95% CI: 11-64); follow-up 40% (95% CI: 16-70) Control: end line: 93% (95% CI: 69-99); follow up: 60% (95% CI: 32-83) p=0.1 marginally significant
Ivaschenko 2017	Adolescent violence perpetration: Youth violent crimes	Difference-in-differences (DD) estimates	NA	The programme reduced participants' frequency of threatening to use force by 13 percentage points, and of fighting back in response to an attack by 11 percentage points, which correspond to reductions of 65 and 25%, respectively, relative to the baseline. Impacts on aggressive behaviour and violence, DD (mean/SE): <ul style="list-style-type: none"> <li>Used threats or force with somebody: -0.127 (0.039); p&lt;0.01</li> <li>Have been attacked and fought back: -0.148 (0.057); p&lt;0.01</li> <li>Damaged somebody's property for fun/joke: -0.060 (0.030); p&lt;0.05</li> <li>Involved in an assault (physical or verbal) in the last 6 months: 0.003 (0.054); non-significant</li> <li>Involved in trespassing in the last 6 months: 0.040 (0.036); non-significant</li> </ul>



Reference	Violence outcome	Analysis method	Baseline of violence outcome	Results
Bullinger 2023	Child abuse and neglect	Fixed-effects	Number of child abuse neglected-related emergency department (ED) visits per day 12 days before each month's child tax credit payment date, mean (SD): <ul style="list-style-type: none"> <li>2021: 7.19 (2.66)</li> <li>2018 and 2019: 5.89 (2.54).</li> </ul>	There was a decrease in these ED visits in the 4 days following the advance CTC payments, although the reduction was not significant. There were significant reductions in ED visits among male children: point estimate and non-Hispanic White children point estimate. These reductions did not persist. Point estimate (95% CI) <ul style="list-style-type: none"> <li>General: -0.22 (-0.45 to -0.01); p=0.06, non-significant</li> <li>Male children, -0.40 (-0.75 to -0.06); p=0.02</li> <li>Non-Hispanic white children: -0.69 (-1.22 to -0.17); p=0.01</li> </ul>
Xu 2022	Child maltreatment: child neglect	Negative binomial regression	NA	Receiving financial assistance was associated with a decreased risk of child neglect in the full sample and a subsample with household income >USD30,000 Combination of financial assistance <ul style="list-style-type: none"> <li>Full sample b = -0.88, p&lt;0.05</li> <li>Household income ≤ USD30,000 b=-1.07; non-significant</li> <li>Household income &gt; USD30,000: b=-1.31; p&lt;0.05</li> </ul>
Kovski 2022	Child maltreatment	Fixed-effects, difference-in-differences analysis	Average weekly rate reported child maltreatment: 67 per 100,000 children	EITC and CTC payments were associated with lower state-level rates of child maltreatment reports. For each additional \$1000 in per-child EITC and CTC tax refunds, state level rates of reported child maltreatment declined in the week of and 4 weeks following refund payments by an overall estimated 5%. The largest impact of EITC and CTC refunds occurred 3 weeks after refund issuance, with child maltreatment reports decreasing by 7.1 per 100 000 children. Number of Child Maltreatment Reports Per 100 000 Children (95% CI) <ul style="list-style-type: none"> <li>EITC and CTC, week of issuance: -3.6 (6.0, 1.2), significant at 1%</li> <li>EITC and CTC, issued 1 week before: -3.8 (-6.9, -0.8), significant at 5%</li> <li>EITC and CTC, issued 2 weeks before: -2.4 (-5.1, -0.3), non-significant</li> <li>EITC and CTC, issued 3 weeks before: -7.1 (-10.2, -3.9), significant at 1%</li> <li>EITC and CTC, issued 4 weeks before: -0.1 (-4.2, 4.3), non-significant</li> <li>Cumulative effect: -16.8 (-26.0, -7.7), significant at 1%</li> </ul>
Moe 2022	Youth violence: assault, fight at school or work, take something worth \$50 or more, hit or seriously threaten to hit someone	Logistic regression models	NA	EITC was associated with reduced risk of fighting at school and of hitting or seriously threatening to hit someone. No association between EITC and stealing something worth more than USD 50. Odds Ratios (OR) and Risk Differences (RD, per 1000 people) in probability of

Reference	Violence outcome	Analysis method	Baseline of violence outcome	Results
				<p>additional youth outcomes associated with each additional USD 1000 of cumulative EITC</p> <ul style="list-style-type: none"> <li>Conviction for assault: crude OR 0.74 (95% CI: 0.70, 0.78); RD -12.9 (95% CI: -15.4, -10.4) adjusted 0.86 (95% CI: 0.74, 1.00); RD -5.8 (95% CI: -11.8, 0.10)</li> <li>Fought at school or work: crude OR 0.78 (95% CI: 0.76, 0.80); RD -37.1 (95% CI: -40.7, -33.6) adjusted OR 0.85 (95% CI: 0.78, 0.93); RD -22.4 (95% CI: -34.9, -9.9)</li> <li>Stole something worth more than USD 50: crude OR 0.82 (95% CI: 0.78, 0.86); RD -9.2 (95% CI: -11.7, -6.8) adjusted OR 0.90 (95% CI: 0.76, 1.06); RD -4.8 (95% CI: -12.4, 2.8)</li> <li>Hit or seriously threatened to hit someone: crude OR 0.87 (95% CI: 0.85, 0.88); RD -27.9 (95% CI: -31.2, -24.7) adjusted OR 0.92 (95% CI: 0.86, 0.98); RD -16.0 (95% CI: -28.8, -3.2)</li> </ul>
Dalve 2022	Youth violence: physical fighting, threaten or injuries	Modified Poisson regression models	<p>2005-2019: State-level prevalence change, %</p> <ul style="list-style-type: none"> <li>Physical fighting: 10.0-37.3%</li> <li>Physical fighting on school property: 4.6 to 16.9</li> <li>Threatened or injured with a weapon on school property: 4.3 to 12.8%</li> </ul>	<p>A 10-percentage point greater state EITC was significantly associated with 3.8% lower prevalence of physical fighting among youth. Prevalence ratio per 10,000 (95%CI), overall</p> <ul style="list-style-type: none"> <li>Physical fight: 0.96 (0.94-0.99), significant</li> <li>Physical fight on school property: 1.01 (0.95-1.07), non-significant</li> <li>Threatened or injured with a weapon on school property: 0.97 (0.92-1.02), non-significant</li> </ul> <p>Sub-groups, physical fight</p> <ul style="list-style-type: none"> <li>Male: 0.96 (0.93, 0.98), 149 fewer, p=0.04</li> <li>Female 0.97 (0.94, 1.01), p=0.04</li> <li>White: 0.95 (0.92, 0.98), 118 fewer, p&lt;0.001</li> <li>Black 0.98 (0.95, 1.01), 75 fewer, p&lt;0.001</li> <li>Hispanic/Latino 1.00 (0.97, 1.02), 14 fewer, p&lt;0.001</li> <li>Other race and ethnicity: 0.89 (0.86, 0.91), 313 fewer, p&lt;0.001</li> </ul>
Morgan 2021	Suicide	Difference-in-differences, Poisson regressions, prevalence ratios (PRs)	<p>Mean rate of suicide deaths at baseline, per 10,000 (SD):</p> <p>No EITC during study period: 1.69 (0.37); EITC for full study period 1.26 (0.34); introduction of EITC during study period 1.53 (0.46)</p>	<p>A 10 percentage-point increase in the generosity of state EITC was associated with lower frequency of suicide deaths. Negative relationship between EITC and suicide death were robust to model selection.</p> <p>Impact of 10 percentage point increase in state EITC on suicide deaths, prevalence ratio PR (95% CI):</p> <ul style="list-style-type: none"> <li>Unadjusted PR 0.99 (0.99, 1.00); non-significant</li> <li>Adjusted PR 0.99 (0.99, 1.00); non-significant</li> </ul> <p>Impact of 10 percentage point increase</p>

Reference	Violence outcome	Analysis method	Baseline of violence outcome	Results
				<p>in state EITC on deaths per 10,000 population, prevalence difference PD (95% CI):</p> <ul style="list-style-type: none"> <li>Unadjusted PD -0.024 (-0.036, -0.011); <math>p \leq 0.05</math></li> <li>Adjusted PD -0.023 (-0.037, -0.010); <math>p \leq 0.05</math></li> </ul>
Spencer 2020	IPV: coercive control and emotional abuse	Difference-in-difference	NA	<p>Only refundable EITC had a positive impact on any coercion. Odds Ratio (95% CI)</p> <p>Any Coercion:  EITC non-refundable 0.88 (0.37, 2.09), non-significant  EITC refundable 0.71 (0.48, 1.04), <math>p &lt; 0.05</math>  TA NF 1.01 (1.00, 1.01), non-significant</p>
Klevens 2017	Child abuse: abusive head trauma	Difference-in-difference analyses	NA	<p>Refundable EITC was associated with a 3.1 decrease (13% reduction) in abusive head trauma admissions per 100,000 children (adjusted, 95% CI: 6.5, 0.3; <math>p=0.08</math>)</p> <p>Non-refundable EITC was not associated with a decrease (adjusted, 2.1 [95% CI: -4.1, 8.3]; <math>p=0.49</math>)</p>
<b>Start-up grant</b>				
Ozler 2020	Violence against adolescents: Sexual violence	Intent-to-treat analysis using linear regression	<p>Sexual violence in general: 37.3%</p> <p>Physically forced to have sex: 7.8%</p> <p>Non-physically pressured (coerced/persuaded): 8.4%</p> <p>someone unsuccessfully attempt to have sex with them: 24.7%</p> <p>Touched in a sexual way: 28.9%</p>	<p>Effects of both GE and GE+ on sexual violence, and protective factors were low and not statistically significant at the 95% level of confidence.</p> <p>Sexual violence, GE: -0.069 (0.069); GE+: -0.031 (0.060), non-significant</p> <p>Non-consensual touching, GE: 0.038 (0.024); GE+: 0.046 (0.021), <math>p &lt; 0.05</math></p> <p>Attempted rape, GE: -0.031 (0.035); GE+: -0.002 (0.032), non-significant</p> <p>Pressured sex, GE: 0.011 (0.039); GE+: 0.002 (0.033), non-significant</p> <p>Rape, GE: 0.045 (0.041); GE+: -0.028 (0.034), non-significant</p> <p>Physical violence, GE: -0.019 (0.017); GE+: 0.016 (0.013), non-significant</p>
Ismayilova 2017	IPV: physical and emotional	Repeated-measures logistic, linear mixed effects regression models and moderation analysis	<p>Lifetime domestic violence (ever experienced):</p> <p>Emotional violence % (CI):  Control group: 23.33 (14.48, 35.37)  Trickle up: 39.17 (29.5, 49.77)  Trickle up +: 30.83 (23.2, 39.68)  Non-significant</p> <p>Physical violence % (CI):  Control group: 10 (4.77, 19.77)  Trickle up: 20.83 (17.83, 24.19)  Trickle up+: 10.83 (4.33, 24.58)</p>	<p>Women in both intervention arms reported a significant reduction in emotional spousal violence in the past year, with the effect higher for the combined intervention.</p> <ul style="list-style-type: none"> <li>Physical violence (at 12-month follow-up):  Trickle Up+ vs control: OR .29 (0.02, 3.53), non-significant  Trickle Up+ vs Trickle Up: 0.38 (0.04, 4.21), non-significant  Trickle Up vs control: OR 0.75, 95% CI (0.14, 3.92), non-significant</li> <li>Emotional violence:  Trickle Up+ vs control: OR 0.19, 95% CI (0.06, 0.64), <math>p &lt; 0.001</math>  Trickle Up+ vs Trickle Up: OR 0.69, 95% CI (0.21, 2.24), non-significant  Trickle Up vs control: OR 0.28, 95% CI (0.10, 0.82), <math>p &lt; 0.001</math></li> </ul>

Reference	Violence outcome	Analysis method	Baseline of violence outcome	Results
			Non-significant Current domestic violence (in past year) Emotional violence % (CI): Control group: 20 (13.08, 29.35) Trickle up: 35 (26.8, 44.2) Trickle up+: 30 (21.21, 40.56) p <0.05 Physical violence % (CI): Control group: 9.17 (4.86, 16.62) Trickle up: 15.83 (14.24, 17.56) Trickle up+: 7.5 (2.73, 18.97) Non-significant	
Green 2015	IPV: physical, emotional, and sexual abuse, and abusive or controlling behaviours	Intention-to-treat via OLS regression	The prevalence of any abuse within the past 8 months among women assigned to the control group was 19.7%	The programme's effect on a self-reported index of physical, emotional, and sexual abuse among women is essentially zero. ITT estimates, physical/emotional abuse in the past 8 months: Phase 1, women only: 0.02 (SE: 0.06; 95% CI: -0.1-0.14) Phase 2, control: 0.03 (SD 1.17) Women only: 0.01 (SE: 0.08; 95% CI: -0.14-0.16) Women and partners: 0.08 (SE: 0.06; 95% CI:-0.2-0.04) All non-significant

NA: Not Available; <sup>a</sup> Evaluated CCT/UCT and <sup>b</sup> cash interventions.

## Highlights

- None of the literature reviews currently available have evaluated the strength of evidence so far. Our objective was to deliver a comprehensive review of the relationship of cash-based incentives on a variety of violence outcomes and provide the strength and direction of the evidence and research gaps by using an evidence map.
- Despite the important amount of mixed evidence, Our review indicated that cash-based incentives reduce suicide and protect women from emotional, sexual and physical IPV, children from physical violence and youth from sexual violence.
- Cash-based incentives aligned with other social policies may reduce violence. These interventions must be locally adapted with the impact on violence measured by using robust and standardised tools.

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