Original Research

Microfinance and Violence Against Women in Rural Guatemala

Isabel Cepeda,1 Maricruz Lacalle-Calderon,2 and Miguel Torralba3

Abstract
Violence against Women (VaW) has come to be recognized as a serious human rights abuse with important consequences not only for women but for whole societies. Since VaW has several manifestations, it is possible to differentiate among different types of violence. In this article, a broad theoretical framework with different dimensions of gender violence was adapted to a Latin American social and cultural context to measure three out of the five main types of violence: economic violence, emotional psychological violence, and coercive control. The goal of this article is to provide empirical evidence to determine whether access to microfinance services plays a role in reducing VaW. To this end, we designed and performed a cross-sectional study with a treatment and a control group in rural Guatemala. A sample of 883 rural women in the “Altiplano” area of Guatemala (448 women with microfinance services and 435 without) was surveyed from May to November 2012. The results of the bivariate logistic regression showed evidence of association between access to microfinance services and reduction of VaW. After adjusting for covariates, global, economic, and emotional psychological violence maintained a negative and statistically significant association with microfinance, while only coercive control showed no statistical association with microfinance services. Access to microcredits showed a very clear

1Universidad Rey Juan Carlos, Madrid, Spain
2Universidad Autónoma de Madrid, Spain
3Universidad de Alcalá, Guadalajara, Spain

Corresponding Author:
Maricruz Lacalle-Calderon, Department of Development Economics, Universidad Autónoma de Madrid, Avda. Francisco Tomás y Valiente 5, 28049 Madrid, Spain.
Email: maicu.lacalle@uam.es
relationship to reducing economic and emotional violence but not coercive control, a factor that may be determined by social and cultural norms. In contrast to Status Inconsistency Theory, which has been tested primarily in Asia, our study of Guatemala showed that increased status and economic independence of women due to their participation in microfinance services reduced VaW.

**Keywords**
violence against women, gender, microfinance

**Introduction**

During last decade, the question whether and how microfinance impacts any social or economic dimension has been a subject of intense debate (Attanasio, Augsburg, De Haas, Fitzsimons, & Harmgart, 2015). Several empirical studies analyzing whether microfinance positively affects poverty, consumption, or business profits have obtained mixed results (Ahlin & Jiang, 2008; Banerjee, Karlan, & Zinman, 2015). Although several papers have focused on the impact of microcredits on women empowerment (Ashraf, Karlan, & Yin, 2010; Garikipati, 2012; Pitt, Khandker, & Cartwright, 2006; Swain & Wallentin, 2009, among others), few studies have addressed the relationship between microcredits and gender violence explicitly (Sambisa, Angeles, Lance, Naved, & Thornton, 2011). Although a close relationship may exist between Women’s Empowerment (WE) and Violence against Women (VaW) or gender violence, WE and VaW are different concepts. This article focuses on VaW, not WE.

The slight empirical evidence on the relationship between microcredits and gender violence has also obtained mixed and contradictory results. Although some studies have suggested a positive impact of microfinance on reduction of VaW (Bates, Schuler, Islam, & Islam, 2004; Kim et al., 2007; Panda, 2014; Schuler, Hashemi, Riley, & Akhter, 1996), others have found a negative impact—that women receiving microcredit services are more likely to suffer violence from their partners (Goetz & Gupta, 1996; M. R. Khan, Ahmed, Bhuiya, & Chowdhury, 1998; Schuler, Hashemi, & Badal, 1998). This lack of conclusive evidence, as well as the fact that all studies cited above were designed and implemented in Asia, justifies the need for further research in other settings, such as Latin America, to evaluate generalizability of these findings (Kim et al., 2007).

This article investigates whether access to microfinance services has any effect on VaW in a very poor rural setting in Guatemala. It also attempts to
provide a more detailed quantitative analysis of how social and cultural norms influence the impact of microcredits on violent behavior against women. In contrast to Status Inconsistency Theory—which posits that increased status and economic independence of women through their participation in microfinance services threaten marital relationships and domestic violence and which has been tested primarily in Asia (Murshid & Zippay, 2016)—this study found some evidence of a positive relationship between receipt of microfinance services and reduction of VaW.

This study contributes to the literature in two ways. First, it adapts a broad theoretical framework with different dimensions of gender violence to a Latin American social and cultural context. Second, it uses a cross-sectional study with treatment and control groups to increase validity of the results. A survey of 883 rural women in the “Altiplano” area of Guatemala was performed from May to November 2012 (the sample included 448 women with microfinance services and 435 without). The survey data were then analyzed using bivariate and multivariable logistic regression to compare results between beneficiaries and nonbeneficiaries of microfinance services to investigate the relationship between microfinance and violence.

This article is organized as follows. “Violence Against Women” section illustrates the problem of gender violence, its dimensions, and current data. “Microfinance as a Tool to Fight Violence Against Women” section studies the potential effects of microfinance on reduction of gender violence. “Empirical Analysis” section presents the data and methodology used. “Results” section presents the results, and “Conclusion” section offers some conclusions.

**Violence Against Women**

Recognition of VaW, or gender violence, as a social problem is very recent. Before 1960, it was viewed as atypical and attributed only to those with psychopathological disorders or mental problems (Segura, 2008). In 1993, the 2nd United Nations Conference on Human Rights in Vienna acknowledged all women’s rights as an integral part of human rights and their promotion essential (Azkar, Sohail, Yasin, Mahmood, & Mushtaq, 2012; Dauer & Gomez, 2006). Since then, VaW has gradually come to be recognized as a serious human rights abuse with significant consequences, not only for women but for society as a whole, since it is a major public health issue with serious health costs (Al Habib, Nur, & Jones, 2010) and consequences for achieving equality, development, and peace (Tinker & Jaquette, 1987). Today, VaW remains a universal epidemic, present in every country, cutting across boundaries of culture, class, education, income, ethnicity, and age (Mutiso, Chessa, Chesire, & Kemboi, 2010). Although VaW is one of the
most widespread and systemic human rights abuses in the world (Azkar et al., 2012), it has only recently begun to receive sufficient study. Gradual, albeit slow, emergence of academic studies on VaW is gaining recognition as an important tool in the fight against this human rights violation (Rico, 1996).

VaW is a complex phenomenon, and its many causes make it very difficult to eradicate. Due to lack of a uniform definition (Al Habib et al., 2010), its proxies and indicators vary greatly across studies and official national statistics. Although these issues substantially hinder reliable estimates and meaningful comparisons, data have confirmed both the increasing prevalence of all types of gender violence over time in all countries (Al Habib et al., 2010) and the magnitude of this world epidemic. It is estimated that 38% of women murdered worldwide are the victims of violence by intimate partners and/or other family members in the domestic context (World Health Organization [WHO], 2013). This percentage reached 100% in Iceland, 83.3% in Slovenia, 58.1% in Spain, and 54.8% in India in 2012, and 51.8% in the United States in 2011 (United Nations Office on Drugs and Crime [UNODC], 2013).

Since VaW has several manifestations, it is possible to differentiate among different types. Following the WHO, VaW may be physical, sexual, or psychological (WHO, 2002), but the Spanish Health and Social Services Ministry identifies two manifestations of psychological violence: emotional violence and coercive control. The European Institute for Gender Equality (2017) considers economic violence as another important type of violence. We can thus differentiate among five types of VaW:

**Physical Violence**

All physical aggression suffered by women, such as beating, slapping, burning, or choking (WHO, 2012).

**Sexual Violence**

All types of sexual abuse or harassment, such as forced sex or coercion of women to commit unwanted sexual acts or to have sex with others (European Institute for Gender Equality, 2016).

**Emotional Psychological Violence**

It encompasses threats, humiliation, verbal aggression, and/or scorn (European Institute for Gender Equality, 2016). Manifestations include lack of respect for the woman by her husband or even her children, as a learned response to their father’s attitude.
Coercive Control or Controlling Behaviors

It includes depriving women of freedom, unjustified jealousy, vigilance, and coercion so that the woman cannot act freely, including limitation of women’s access to family planning (WHO, 2002). The result is women’s isolation and lack of freedom, for example, their inability to travel alone outside the village or to speak with other male members of the community without the husband’s or father’s permission (Tanha, Beck, Figueredo, & Raghavan, 2009).

Economic Violence

It occurs when the man maintains control of family finances and decides how to save or spend, without taking his spouse’s opinion into account, decreasing the woman’s economic independence (European Institute for Gender Equality, 2017). Economic violence includes controlling and limiting the woman’s access to financial services such as credit or savings, medical attention, employment, or education. As a result, the aggressor has complete control not only of the money but also of the victim’s resources and activities. Economic violence is not only registered in situations of poverty, although that is where it is most frequent. There are cases in which women live comfortably, even in luxury, but lack control of family money or of decisions about how to use it. Examples of economic gender violence include the woman’s need to ask her spouse for permission to apply for credit and her inability to participate in the decision to buy or sell her property or in decisions about how to manage her business. Economic violence is clearly connected to other manifestations of VaW, such as coercive control, since the man makes family decisions without taking his wife’s opinion into account (Fawole, 2008). It is also related to physical violence, since the tensions generated by economic violence can erupt into physical aggression, negatively affecting the physical and mental health of women so abused.

Understanding the phenomenon of gender violence requires analyzing the patterns of violence directed toward women and the underlying mechanisms that permit its emergence and perpetuation (Panda, 2014). The growing literature on the factors associated with the VaW has highlighted the interaction of sociocultural and individual factors (Flood & Pease, 2009; Sambisa et al., 2011). Among the most important factors explaining the prevalence of VaW are cultural norms and traditions. Because such customs are ingrained in society, a significant share of the population normalizes, tolerates, and accepts VaW; nobody questions it (Azkar et al., 2012; Bates et al., 2004). Customs also perpetuate sexist beliefs, convincing much of society that men and women are not equal (Grown, Gupta, & Kes, 2005) and even associating
masculine characteristics with sexual domination and feminine with submission (Murnen, Greenfield, Younger, & Boyd, 2016). In countries like Ghana, cultural norms and traditions are so strong that they may lead women themselves to think that they deserve to be beaten (Tenkorang, Owusu, Yeboah, & Bannerman, 2013). Among sexist cultural norms, patriarchy stands out as the main reason for VaW, since it reinforces inequality in power relations, as occurs in Pakistan (Fawole, 2008; S. Khan & Rizwan, 2011). The consistent relationship between men’s adherence to patriarchal attitudes and their use of VaW (Flood & Pease, 2009) is also important in developed countries such as the United States and other Western countries (Johnson, 1995). Although patriarchal structures are neither universal nor uniform, VaW is a crime largely unpunished and invisible in patriarchal societies. Considered a family issue in countries such as Egypt, Iraq, Jordan, Lebanon, Syria, Pakistan, and Yemen, it receives broad social acceptance (Grown et al., 2005). Although patriarchy is an important risk factor, it is not a sufficient condition for the prevalence of VaW. In Europe—whose societies claim not to be very patriarchal (Gracia & Merlo, 2016)—20% to 25% of women experience physical violence at least once during their adult lives, and 12% to 15% of women who have had a relationship have been the object of domestic abuse after the age of 16 (Prpic & Shreeves, 2016). In Finland and Sweden, countries purported to have low rates of sexism, research has identified a “culture of violence” resulting from the effects of alcohol (Lipsky, Caetano, Field, & Larkin, 2005; Weinsheimer, Schermer, Malcoe, Balduf, & Bloomfield, 2005), placing these countries at the head of gender violence in Europe (European Institute for Gender Equality, 2016). It is important to note that social, political, and cultural conditions in these countries may affect the statistics. In countries with higher trust in police and other institutions—typically more developed countries—victims identify the aggression and feel safer about reporting it. Therefore, higher reporting of VaW does not necessarily reflect higher rates of VaW. The second most important factors explaining the global prevalence of VaW are economic, with the male–female wage gap as one of the most important (Aizer, 2010). Azkar et al. (2012) argue that reducing the wage gap or providing better access to formal or informal jobs reduces violence. Other factors that influence the prevalence of VaW are educational (Hove & Khoza, 2011; Mutiso et al., 2010), demographic, historical, psychological, and religious (Fawole, 2008; Kyu & Kanai, 2005; WHO, 2002). As a result, the oppression that women suffer varies based on each social, economic, cultural, and political context (Mohanty, 2003).

In rural areas of developing countries such as Guatemala, economic and social conditions relegate women to a secondary role (Galindo-Reyesa, Ciruela-Lorenzoa, Pérez Moreno, & Pérez-Canto, 2016), and traditional
cultural norms contribute to perpetuating women’s subordinate status. As a result, gender violence is widely accepted as a social norm (Kim et al., 2007). In Guatemala, the most rural country in Central and South America (Ordoñez & Falck, 2013), society’s intense machismo, with its twofold Mayan and Hispanic roots (Paz, 2013), contributes to reinforcing traditional roles of men and women, to some extent justifying and excusing VaW and perpetuating gender violence.² As a result, 90% of Guatemalan women acknowledge the presence of VaW in their communities, and 70% report having suffered or witnessed their mother suffering VaW at the hands of a partner (Paz, 2013).

**Microfinance as a Tool to Fight Violence Against Women**

Microfinance was born some decades ago to provide financial services to low-income households, specifically targeting women. This focus was based on the fact that women in poor households in developing countries were more likely to be credit-constrained and hence less able to undertake income-earning activities (Swain & Wallentin, 2009). Women disproportionally face disincentives when applying for credit and are unfairly denied credits (Abor, 2006), and the problem is worse for poorer women in developing countries. Such financial exclusion prevents women from having an independent livelihood, endangering their freedom, and encouraging their submission. Poor, disadvantaged, and excluded women face much higher risks of abuse.

Microfinance institutions (MFIs) offer small-scale loans, savings accounts, insurance, housing loans, and other financial services to poor and excluded women (The Consultative Group to Assist the Poor [CGAP], 2009). Small-scale loans are designed to unlock women’s productive potential by growing small businesses. Savings accounts help to balance their consumption patterns and provide for unexpected negative events. Insurance services allow women to preserve microbusiness earnings intact in the event of illness or natural disasters (Armendáriz & Morduch, 2010). Microfinance services can thus help poor women to improve their financial security and take advantage of new business opportunities, enabling them to expand or diversify their economic activities, increase their incomes and well-being (Ahlin & Jiang, 2008; Robinson, 2001), and ultimately achieve greater economic independence (Vonderlack-Navarro, 2010). Microfinance also creates personal incentives for growth, as it has the potential to stimulate and increase borrowers’ self-esteem and self-confidence as they discover that they can receive a loan, invest money, and finally repay the debt (Lacalle, Alfonso-Gil, & Rico, 2015). These research findings suggest that microfinance may be a critical ingredient in reducing VaW. Access to financial services puts resources and
power into the hands of poor and excluded women, providing more control over their finances and improving their economic and personal independence (Kim et al., 2007).

Lack of resources caused by financial exclusion is not the only or the most important cause of VaW, but it leaves women more vulnerable to violence and less able to escape from it (Dauer & Gomez, 2006). Economic violence allows abusive men to maintain power and control over women. According to Kabeer (2001),

Access to loans for the women helped them to reduce the burden for the men since women were now able to share some of the responsibility for providing for their families. The result was a reduction on levels of tension and conflict and greater affection from their husbands. (p. 72)

Based on this literature, the access to financial resources enabled by microfinance may open economic opportunities for women that enhance women’s status in households and encourage reduction of violence. Other studies, such as Goetz and Gupta (1996), Schuler et al. (1998), and M. R. Khan et al. (1998), found, however, that participating in credit programs and having more opportunities created tension in the household and precipitated domestic violence. Since the limited existing literature has not shown a consistent relationship between income-generating activities and violence reduction (Sambisa et al., 2011), the following section seeks to contrast this hypothesis.

Empirical Analysis

Design and Sample Selection

To fulfill our main objective, testing the hypothesis that microcredit services reduce VaW, we designed and developed a cross-sectional study with treatment and control groups (TG and CG) in rural Guatemala. Between May and November 2012, we surveyed 883 rural women living in the “Altiplano” area of Guatemala (one of the country’s poorest areas). The survey questionnaire, which included information on the women’s social and economic situations, empowerment, and well-being, was pretested, in the same areas as those studied, by field-workers from the MFI. Researchers administered the surveys according to the Assessing the Impact of Microenterprise Services (AIMS) protocol (Nelson et al., 2001) after obtaining informed consent from all participating women. They sought to ensure privacy during the surveys. All researchers were trained to deal with any atypical answers or violent reaction from the women or their husbands.
The TG was composed of 448 women currently receiving microcredits from an MFI that provides financial and nonfinancial services to rural and very poor households in Guatemala. The TG was selected through stratified random sampling by agency, sex, and credit seniority from the full list of MFI borrowers. From the total list of 40,000 clients all over Guatemala, our eligibility criteria in selecting the TG were (a) being women, (b) having 24 to 48 months of seniority as a microfinance client in this Guatemalan MFI, and (c) for safety reasons, being a customer of one of the following agencies: Cobán, Sta. Cruz Quiché, Ixcán, Jalapa, Polochic, or Fray Bartolomé de las Casas. Only 3,327 women fulfilled these three eligibility criteria, and 448 were finally selected through random sampling.

The CG was composed of 435 women nonmicrofinance customers. To make both groups as similar as possible, we paired each TG woman with a counterpart who lived in the same village and shared the same sociodemographic characteristics. This was a tricky task, since neither the MFI nor the National Institute for Statistics provided detailed information at this disaggregated spatial resolution. We thus looked for each woman in the CG following a random walk method4 (Karlan & Goldberg, 2011).

**Measuring VaW**

To investigate the relationship between microcredits and VaW, we designed questions to measure three of the five types of VaW described above. Because of threats⁵ received from the husbands and other family members during the questionnaire pretest, we decided to focus on measuring economic violence, emotional psychological violence, and coercive control but not physical or sexual violence.

To create the indicators or outcome variables for these three types of violence, we designed sets of three, two, and two “yes/no” violence tactic questions to assess each of the three types of violence (see Table 1). We coded the responses to each question (1 if the answer indicated violence against the woman, 0 if not) and created three binary composite violence variables: Economic Violence, Emotional Psychological Violence, and Coercive Control. We concluded that a woman suffered any of these three types of violence if she answered “yes” to more than one of the questions in each category.

To provide a second measure of VaW, we created a global composite measure of violence (Global Violence), a new binary variable using the seven questions in Table 1. In this case, we understood a woman to suffer violence if she answered “yes” to more than three of these seven questions.
Method

The data were gathered and stored in Excel and later analyzed with the SPSS 20.0 statistics application.

All variables except age and wage were dichotomous (1 = Yes, 0 = No). The continuous variables were expressed as means with their standard deviation and categorical variables as percentages in the descriptive analysis.

To investigate associations between microfinance and the three different types of violence considered, we developed bivariate logistic regression models, using “having or not having microcredit” as the independent variable. The categorical variables were compared via the χ² test and Fisher’s exact test when appropriate. Student’s t test was used to compare the means of the continuous variables. In cases of unequal variance (heteroscedasticity) or non-Gaussian distribution, nonparametric tests were applied (Mann–Whitney). To measure risk, we used the odds ratio. Finally, we ran a stepwise multivariable logistic analysis with microfinance as the main independent variable and education, age, wage, and number of children as the controls variables. All contrasts were two-tailed with p values below .05 and could thus be considered as statistically significant.
Table 2. Basic Socioeconomic and Demographic Characteristics in TG and CG.

<table>
<thead>
<tr>
<th>Variables</th>
<th>TG</th>
<th>CG</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (M and SD in parentheses)</td>
<td>38.1(10.8)</td>
<td>35.3(12.6)</td>
<td>.001</td>
</tr>
<tr>
<td>Religion (percentage of Catholic women)</td>
<td>96.9%</td>
<td>95.6%</td>
<td>.355</td>
</tr>
<tr>
<td>Indigenous (percentage of women belonging to an indigenous ethnic group)</td>
<td>90.6%</td>
<td>88.2%</td>
<td>.246</td>
</tr>
<tr>
<td>Marital status (percentage of married women)</td>
<td>82.1%</td>
<td>80.2%</td>
<td>.467</td>
</tr>
<tr>
<td>Place of residence (region, department, and village)</td>
<td>—</td>
<td>—</td>
<td>.353</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of women with primary education</td>
<td>29.9%</td>
<td>41.7%</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Percentage of literate women (who know how to read and write)</td>
<td>43.1%</td>
<td>51.3%</td>
<td>.021</td>
</tr>
<tr>
<td>Number of children (M)</td>
<td>2.96</td>
<td>2.41</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Type of house</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With running water</td>
<td>42.1%</td>
<td>48.7%</td>
<td>.076</td>
</tr>
<tr>
<td>With drain</td>
<td>12.8%</td>
<td>15.4%</td>
<td>.391</td>
</tr>
<tr>
<td>With a solid concrete ceiling</td>
<td>13.4%</td>
<td>12.4%</td>
<td>.176</td>
</tr>
<tr>
<td>Wage (in local currency, Quetzales) (M and SD in parenthesis)</td>
<td>707.6 (974.9)</td>
<td>493.3 (401.3)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Main salary (percentage of women who are main breadwinners at home)</td>
<td>26.6%</td>
<td>14.7%</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Note. TG = treatment groups; CG = control groups. Source. Compiled by authors using survey data.

Results

Table 2 shows the baseline demographic and socioeconomic characteristics (age, marital status, education level, ethnic status, type of house, number of children, wage, and importance of woman’s salary to her home) of the Guatemalan women in the TG and CG. Some characteristics were similar for women in both groups, but we also found differences between the groups. The differences were taken into account in the multivariable analysis.

Almost no differences were found between survey respondents with and without microcredit (TG and CG, respectively) in the following characteristics: religion—almost all (96.9% in TG and 95.6% in CG) were Catholic, marital status—a very similar proportion of women in both groups (82.1% in
TG and 80.2% in CG) were married, place of residence—women in both groups lived in the same villages, indigenous status—a very similar proportion of women from both groups (90.6% in TG and 88.2% in TG) were indigenous, and type of dwelling—very similar drain conditions, access to running water, or type of ceiling in both groups. We did, however, find significant differences among women in the two groups regarding age, education, number of children, wage, and main family breadwinner. Women with microcredits (TG) were slightly older (38.1 years old, compared to 35.3 in the CG), less educated (among women with microcredit, only 29.9% had primary education and 43% knew how to read and write, compared to 41.7% and 51% in the group without microcredits), had more children (2.9 compared to 2.4 in the CG), and not only earned a higher wage (707.6 Quetzales vs. 493.3) but were also the main breadwinners (26.6% of women in the TG were the main breadwinners, compared to only 14.7% of women in the CG). These variables were introduced as control variables in the multivariable analysis.

Tables 3 and 4 show the results of the bivariate analysis applied. Table 3 shows the results for each of the questions, and Table 4 shows the results for the composite variables.

The results on economic violence were very straightforward. Overall, 73% of women with microcredit (women from the TG) reported that they decided freely how to spend their household income, compared to only 60.7% of women without microcredit (women in the CG), a difference that cannot be chalked up to chance ($p < .001$). Furthermore, 11.6% of women in the TG were able to ask for credit without their husband’s permission, compared to only 6% of women in the CG. Here again, the results were statistically significant ($p = .004$). Last, the percentage of women in the TG who were free to make decisions about managing their business was 89%, as opposed to 82.1% among women from the CG—also a significant difference ($p = .005$). As Table 3 shows, rural poor Guatemalan women with microcredits were 1.75 times more likely than their counterparts without microcredit services to have freedom to decide how to spend their household income, 0.483 times more likely to ask freely for credit, and 1.75 times more likely be able to decide on their business spending and to make decisions to manage their business.

As to emotional psychological violence, the results showed that 99% of these poor rural women in Guatemala from the TG claimed that their children respected them, compared to 96.3% women in the CG. This difference is statistically significant ($p = .012$) and means that women receiving microcredits were 3.87 times more likely to be respected by their children than women without microcredits. The results for respect from husbands were
### Table 3. Bivariate Logistic Regression.

<table>
<thead>
<tr>
<th>Variables</th>
<th>TG (%)</th>
<th>CG (%)</th>
<th>p Value</th>
<th>Odds Ratio</th>
<th>95% Confidence Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic violence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you decide how to spend household income without your husband’s permission?</td>
<td>73.0</td>
<td>60.7</td>
<td>&lt;0.001</td>
<td>1.75</td>
<td>[1.31, 2.32]</td>
</tr>
<tr>
<td>Can you ask for credit without your husband’s permission?</td>
<td>11.6</td>
<td>6.0</td>
<td>0.004</td>
<td>2.070</td>
<td>[1.26, 3.45]</td>
</tr>
<tr>
<td>Do you decide on your business spending without your husband’s permission?</td>
<td>89.0</td>
<td>82.1</td>
<td>0.005</td>
<td>1.75</td>
<td>[1.18, 2.60]</td>
</tr>
<tr>
<td>Emotional psychological violence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your husband respect you more now than in the past?</td>
<td>63.0</td>
<td>58.2</td>
<td>0.195</td>
<td>1.22</td>
<td>[0.90, 1.67]</td>
</tr>
<tr>
<td>Do your children obey and respect you more now than in the past?</td>
<td>99.0</td>
<td>96.3</td>
<td>0.012</td>
<td>3.87</td>
<td>[1.25, 11.99]</td>
</tr>
<tr>
<td>Coercive control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can you leave home without your husband’s permission?</td>
<td>79.2</td>
<td>70.1</td>
<td>0.002</td>
<td>1.64</td>
<td>[1.19, 2.22]</td>
</tr>
<tr>
<td>Can you talk to other men in your village without your husband’s permission?</td>
<td>28.9</td>
<td>26.4</td>
<td>0.41</td>
<td>1.13</td>
<td>[0.84, 1.53]</td>
</tr>
</tbody>
</table>

Note. TG = treatment groups; CG = control groups.
Source. Compiled by authors using survey data.

### Table 4. Bivariate Logistic Regression for Composite Violence Variables.

<table>
<thead>
<tr>
<th>Outcome Variables</th>
<th>TG (%)</th>
<th>CG (%)</th>
<th>p Value</th>
<th>Odds Ratio</th>
<th>95% Confidence Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global violence</td>
<td>12.7</td>
<td>28.5</td>
<td>&lt;.001</td>
<td>0.366</td>
<td>[0.258, 0.517]</td>
</tr>
<tr>
<td>Economic violence</td>
<td>29.2</td>
<td>41.6</td>
<td>&lt;.001</td>
<td>0.580</td>
<td>[0.43, 0.76]</td>
</tr>
<tr>
<td>Emotional psychological violence</td>
<td>30.8</td>
<td>35.9</td>
<td>.116</td>
<td>0.793</td>
<td>[0.59, 1.06]</td>
</tr>
<tr>
<td>Coercive control</td>
<td>7.3</td>
<td>16.7</td>
<td>&lt;.001</td>
<td>0.392</td>
<td>[0.25, 0.61]</td>
</tr>
</tbody>
</table>

Note. TG = treatment groups; CG = control groups.
Source. Compiled by authors using survey data.
similar, although not statistically significant: 63% of women receiving micro-
credits were respected by their husbands, as opposed to 58.2% of women in
the CG ($p = .195$).

The results for coercive control show that 79.2% of women in the TG
were able to go out alone without their husband’s permission, compared to
only 70.1% women in the CG, another statistically significant difference
($p = .002$). Last, although the results were not significant ($p = .41$), they
showed that women with microcredit (in the TG) were more likely to speak
freely (without husband’s permission) with other men in the village (28.9%
vs. 26.4%).

As mentioned above, we also ran a bivariate logistic analysis for each
composite violence variable created (Table 4).

As Table 4 shows, the percentage of women with microcredits (from the
TG) reporting violence was only 12.7%, as opposed to 28.5% among
women without this financial service (from the CG; $p < .001$). We obtained
the same results for economic and coercive control. Thus, the poor rural
Guatemalan women with microcredit services reported suffering fewer lev-
els of economic violence and coercive control than their counterparts with-
out access to microcredit services. This was not the case for emotional
psychological violence, however. Although fewer women in the TG
reported suffering emotional violence than in the CG, this result was not
statistically significant. Receiving microfinance services was thus associ-
ated with a 63% reduction in likelihood to suffer violence (as well as a 42%
reduction in likelihood to suffer economic violence and a 61% reduction in
control violence).

Finally, we applied multivariate logistic regression to these four com-
posite violence variables. Since the results on the basic socioeconomic
and demographic characteristics (Table 2) showed education, income,
age, and number of children to be statistically different between our TG
and CG, as were factors statistically associated with domestic violence
(Bates et al., 2004), we ran a multivariate logistic analysis to control for
these factors and to investigate whether any of them caused the lower
violence among women in the TG. Table 5 presents these results, with the
composite violence variables as the dependent variables, access to micro-
credit services as the main independent variable, and age, number of chil-
dren, education, and income as the control variables. Model 1 measures
income through the “women’s wage,” and Model 2 through “the main
breadwinner at home.”

The results of the multivariate logistic regression in Table 5 showed a
negative relationship between “having access to microfinance services” and
probability of a woman suffering violence. This result was statistically
### Table 5. Multivariate Logistic Regression.

<table>
<thead>
<tr>
<th>Dependant variable: Global violence</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coefficient</strong></td>
<td><strong>p Value</strong></td>
<td><strong>Odds Ratio</strong></td>
</tr>
<tr>
<td>Microcredit services</td>
<td>-0.847</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Age</td>
<td>-0.031</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Number of children</td>
<td>0.000</td>
<td>0.996</td>
</tr>
<tr>
<td>Education</td>
<td>0.570</td>
<td>.006</td>
</tr>
<tr>
<td>Wage</td>
<td>0.000</td>
<td>.378</td>
</tr>
<tr>
<td>Woman main breadwinner</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dependant variable: Economic violence</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coefficient</strong></td>
<td><strong>p Value</strong></td>
<td><strong>Odds Ratio</strong></td>
</tr>
<tr>
<td>Microcredit services</td>
<td>-0.558</td>
<td>.001</td>
</tr>
<tr>
<td>Age</td>
<td>-0.032</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Number of children</td>
<td>-0.010</td>
<td>.824</td>
</tr>
<tr>
<td>Education</td>
<td>0.563</td>
<td>.001</td>
</tr>
<tr>
<td>Wage</td>
<td>0.000</td>
<td>.722</td>
</tr>
<tr>
<td>Woman main breadwinner</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dependant variable: Emotional psychological violence</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coefficient</strong></td>
<td><strong>p Value</strong></td>
<td><strong>Odds Ratio</strong></td>
</tr>
<tr>
<td>Microcredit services</td>
<td>-0.42</td>
<td>.012</td>
</tr>
<tr>
<td>Age</td>
<td>-0.002</td>
<td>.825</td>
</tr>
<tr>
<td>Number of children</td>
<td>-0.032</td>
<td>.465</td>
</tr>
<tr>
<td>Education</td>
<td>0.333</td>
<td>.064</td>
</tr>
<tr>
<td>Wage</td>
<td>0.000</td>
<td>.452</td>
</tr>
<tr>
<td>Woman main breadwinner</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dependant variable: Coercive control</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coefficient</strong></td>
<td><strong>p Value</strong></td>
<td><strong>Odds Ratio</strong></td>
</tr>
<tr>
<td>Microcredit services</td>
<td>0.242</td>
<td>.463</td>
</tr>
<tr>
<td>Age</td>
<td>-0.016</td>
<td>.249</td>
</tr>
<tr>
<td>Number of children</td>
<td>-0.054</td>
<td>.498</td>
</tr>
<tr>
<td>Education</td>
<td>-0.316</td>
<td>.349</td>
</tr>
<tr>
<td>Wage</td>
<td>0.000</td>
<td>.992</td>
</tr>
<tr>
<td>Woman main breadwinner</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Compiled by authors using survey data.
significant for all types of violence analyzed except coercive control. Furthermore, Models 1 and 2 show very similar findings. These results indicated that economic and emotional violence in poor rural areas of Guatemala (as is the case of the Altiplano area) are related to access to microfinance. We can thus conclude that microfinance may be used as a policy tool to fight gender violence, although it did not have any effect on coercive control, which may stem from local customs and cultural factors specific to these areas of Guatemala, such as intense machismo and male aggressiveness, due to its Mayan and Hispanic roots.

Among the control variables, age and being the main breadwinner also had a negative and statistically significant association with violence. The number of children, however, was never significant in explaining violence.

Discussion

Our results are in line with those obtained by Panda (2014), whose analysis of household survey data from India found that use of microfinance services helped to reduce domestic violence. Our results also resemble those of Kabeer (2001), who found that women’s access to loans helped to reduce levels of tension and conflict with their husbands and increased affection between them. Our results differ, however, from those of Schuler et al. (1998), who found that putting resources into women’s hands through microcredit programs indirectly exacerbated violence. These authors also found that the lower risk of VaW might not be due to the protection the program provided but rather to the fact that women who entered those programs were more likely to have husbands with a lower inclination toward violence. Thus, microcredits are not the factor helping to reduce VaW. Our results also differ from those of M. R. Khan et al. (1998), who found that physical abuse was slightly higher among women with microcredit services than among women without.

Among the control variables, surprisingly, education was always significant but showed a positive relationship with violence, the opposite of the relationships obtained in most previous research (Bates et al., 2004; Ferrer, Bosch, Ramis, Torres, & Navarro, 2006; Rodriguez & Lameiras, 2003; Schuler et al., 1996; Yoshioka, DiNoia, & Ullah, 2000). Other authors, such as Ferrer et al. (2006), however, have found that higher education does not guarantee reduction of VaW. We can explain this result based on our knowledge of the rural Guatemalan context and its cultural norms, since more educated women were the only women reporting violence. The others found it difficult even to recognize and name their experience as violence (Flood & Pease, 2009), especially when it was not physical or sexual aggression.
Conclusion

The results of the bivariate logistic regression show evidence of an association between access to microfinance services and reduction of VaW. Furthermore, once we adjusted for covariates, global, economic, and emotional psychological violence maintained a negative and statistically significant association with microfinance, while only coercive control showed no statistical association with microfinance services. Access to microcredits thus seems to have a very clear relationship to reducing economic and emotional violence but not coercive control, a factor that may be determined by the social and cultural norms in this poor rural Guatemalan setting. In contrast to Status Inconsistency Theory, which has been tested primarily in Asia, our study in Guatemala shows that the increased status and economic independence of women due to their participation in microfinance services reduces VaW.

This study has some important limitations. First, the villages in the study were not selected at random. Second, our study’s cross-sectional design made it impossible to establish causal relationships and to analyze behavior over a period of time. Furthermore, the associations found in the regression analysis could be biased by a prior cause (selection bias; Karlan & Goldberg, 2011; Kleinbaum, Morgenstern, & Kupper, 1981; Miettinen & Cook, 1981). There may have been inherent characteristics of microfinance awardees that differentiated them from the controls, such as resilience or family history of violence. Third, although our results are valid for the poor and rural areas of Guatemala, they may not be generalized to other settings. Despite these limitations, we believe that this study contributes to the literature. We strongly believe that economic violence is highly sensitive to microfinance. Receiving microcredits significantly changes women’s economic position, which in turn increases respect for women, reducing emotional psychological violence. Nevertheless, it is necessary to address normative, economic, and sociocultural changes that foster VaW culture, including the importance of questioning social norms that strengthen men’s authority and control of women and that make VaW permissible (WHO, 2013). Finally, it would be of great interest to implement future longitudinal studies to contrast these results to better understand the relationship between microfinance and VaW.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.
Notes
1. The academic literature usually uses the term “gender violence” to refer to Violence against Women (VaW; Merry, 2009). Furthermore, since VaW is usually perpetrated by intimate partners and/or other family members in the domestic context (Azkar, Sohail, Yasin, Mahmood, & Mushtaq, 2012; Mutiso, Chessa, Chesire, & Kemboi, 2010), the literature often uses the term “domestic violence. In this article, we use these terms interchangeably.

2. More information on those sociocultural norms causing this intense machismo in Guatemala (see Otal, 2010; Rodríguez-Shadow & López Hernández, 2011).

3. The research team was composed of two professors and four graduate students (one Spanish, one Italian, one Mexican, and one Argentinian) from the International Master’s in Microfinance for Entrepreneurship at the Universidad Autónoma de Madrid, Spain (UAM). The evaluation was designed at the UAM, pretested by field-workers from the MFI in Guatemala and performed by the students during 4 months in Guatemala. The students administered all surveys by themselves but were always accompanied by community members to help them find the villages and houses of the women in the treatment and control groups and to help them in case of any communication (language) problems.

4. This method consists of “starting from a particular point in a neighborhood walking X number of houses to the left, Y number of houses to the right, etc., and attempting to enroll the resulting household in the comparison group” (Karlan & Goldberg, 2011, p. 39).

5. In response to several questions from the individuals administering the survey, such as “birth control methods used and physical or sexual aggression suffered,” some husbands and other men from the family threatened the survey administrators physically with axes or blunt objects.

References


Otal, E. Q. (2010). *Este cuerpo es mío: Manifestaciones culturales contemporáneas en torno a la violencia machista en América Central y el Caribe español* [This body is mine: Contemporary cultural manifestations on sexist violence in Central America and the Spanish Caribbean]. *Arte Y Políticas De Identidad*, 2, 123-140.


**Author Biographies**

**Isabel Cepeda** pursued doctorate degree in economics and is a full professor at the Department of Economic History and Moral Philosophy at Universidad Rey Juan Carlos (Madrid). She has authored numerous articles, books, and chapters of books in national and international publications. She is also serving as a referee in national and international congresses of recognized prestige. Teacher of domestic violence and gender and specializes in gender, sexism and discrimination.

**Maricruz Lacalle-Calderon** is an associate professor at the Department of Development Economics, Universidad Autónoma de Madrid (Spain), as well as founder and academic director of the “International Master in Microfinance and Financial Inclusion” at this university. Her main research topics include microfinance, poverty, and economic development. She has published in the *Journal of Institutional*
Economics, Canadian Journal of Development Studies, CEPAL Review, Revista de Economía Mundial, European Journal of population, among others. She has also edited and published books as the Handbook of Microcredit in Europe, Social inclusion through microenterprise development (Edward Elgar, 2010).

**Miguel Torralba**, MD, PhD, is an associate professor at Universidad de Alcalá, Madrid (Spain). His field of research focuses on AIDS and HIV. He has published several papers regarding antiretroviral treatment. He has been working as a physician in developing countries as India and Equatorial Guinea and has researched in the field as microcredits as well. He also works in the unit research of Hospital Universitario de Guadalajara as a statistician and in the epidemiological design of cohorts and clinical trials.