Women Empowerment Programs and Intimate Partner Violence[†]

By Manuela Angelucci and Rachel Heath*

Worldwide, approximately one in three women has experienced physical or sexual violence imparted by an intimate partner (World Health Organization 2013). Intimate partner violence (IPV) is a complex phenomenon that can be prompted by a variety of psychological and economic factors relating to the woman, her partner, and their community. A growing number of policies seek to economically empower women, which could affect these factors and result in either increased or decreased IPV. Understanding the determinants of IPV can help policymakers design interventions that are less likely to lead to IPV or identify women at high risk of IPV upon receipt of an intervention or, more generally, a change in economic opportunities.

I. Theories of IPV

IPV is a complex phenomenon. Social scientists have proposed multiple theories to explain it that are not mutually exclusive. Each has predictions for how women's economic empowerment would affect IPV.

Instrumental/Extractive.—Violence may be a tool to control women's resources. Tauchen, Witte, and Long (1991) models IPV as both a source of intrinsic utility and a means to control the spouse. Bloch and Rao (2002) shows that IPV in three southern Indian villages is higher when the grooms receive smaller dowries and marry wealthier wives, consistent with the idea that IPV can be used to extract resources from the bride's family. Heath (2014) provides evidence that women with low baseline bargaining

power are at particular risk of extractive violence when they join the labor force.

Intrinsic/Expressive.—Violence may provide intrinsic utility to some men. Dahl and DellaVigna (2009) shows that watching violent movies reduces IPV because people substitute away from activities, such as alcohol consumption, that trigger violence. These patterns suggest that violence is a normal good for some men. Aizer (2010) shows that a smaller gender wage gap reduces IPV.

Status Threat.—Some men might resort to violence to assert their dominance when they feel that their status is threatened. Angelucci (2008) models IPV as decreasing with household income but increasing when the male status is threatened. The effect of higher wife's income is therefore ambiguous because it leads to both higher household income and lower male status. The empirical evidence from Mexican women who receive cash transfers is consistent with an identity threat motive: while overall the transfer decreases drunken violence among its recipients, violence against women who receive large transfers increases.

Stress/Scarcity.—Stress or scarcity might trigger IPV, for example, by increasing the consumption of alcohol, a self-control inhibitor (e.g., Schilbach 2019) and likely IPV trigger. Card and Dahl (2011) finds that football upset losses—an unexpected negative shock—lead to higher IPV. Haushofer and Shapiro (2016) and Heath, Hidrobo, and Roy (2020) show that unconditional cash transfers directed to household heads can decrease violence.

Exposure.—IPV is positively correlated with the time the couple spends together (Chin 2012).
There are complementarities among all these theories. For instance, if violence is higher in times of scarcity, it could be because scarcity raises the marginal value of instrumental

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violence because, men's intrinsic value of violence is higher when they are stressed or because exerting self-control is harder during cognitive overload.

II. Possible Effects of Women Empowerment on IPV

Women empowerment programs may affect IPV through each of these channels. For instance, consider the effect of an intervention that provides women with an income and a job. The higher income may increase IPV by increasing both the scope for extractive violence and the return on status-based violence. At the same time, the higher income may both increase the woman's bargaining power and alleviate scarcity, thus leading to lower IPV. Lastly, with the woman spending more time outside the house, there are fewer opportunities for IPV.

Beliefs and norms are crucial mediators of the effect of socioeconomic factors on IPV. The same intervention will have different effects on IPV depending on how partners view their status and identity, as well as on whether IPV is socially acceptable or sanctioned.

To conclude, in studying the causes of IPV and how different policies might affect it, researchers should not conduct a "horse race" to determine the one true cause of IPV. Rather, we should seek to understand how the combinations of determinants affect behavior in the specific setting being studied. We illustrate this approach below.

III. Correlates of IPV in South Kivu, Democratic Republic of Congo

The purpose of this exercise is to identify some correlates of IPV and to use these correlates to understand the potential impacts of a women empowerment program on IPV.

IPV is a widespread phenomenon in the Democratic Republic of Congo, with prevalence rates as high as 68 percent (Tlapek 2015).

We use data on 657 married or cohabiting women aged 15 to 55. The data were collected in late 2018 in four communities in South Kivu, Democratic Republic of Congo: Kamanyola, Nyangezi, Mumosho, and Ciheraoni-Luciga. These women were sampled before participating in an empowerment program that provides a monthly stipend of US$10 for one year and
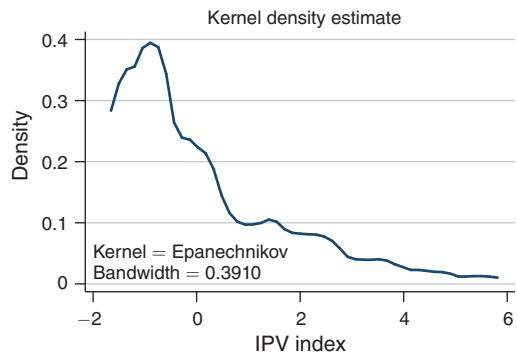

FIGURE 1. IPV INDEX DENSITY

40 to 70 hours of training focused on building numeracy, vocational skills, and connections to other women.

We follow the World Health Organization in considering physical violence, sexual violence, and emotional abuse and controlling behaviors as different aspects of IPV. In the previous 12 months, 45, 24, 19, 10, and 15 percent of women were insulted, were forced to have sex, were prevented from visiting others, were beaten, and had their income attempted to be taken away by their partners, respectively. Not all women have experienced IPV; 41, 29, and 30 percent of women report having experienced zero, one, and at least two such events, respectively.

We use the five IPV questions to construct a standardized IPV index following Anderson (2008). Figure 1 shows the distribution of the index.

Alcohol consumption is a strong correlate of IPV. The median partner went out to drink with his friends two out of the previous 30 nights. However, 10 percent of partners went out all 30 nights. IPV is 57 percent higher among women whose partners spend more than the median number of nights out drinking.

We seek to identify variables that are easy to observe, possibly predetermined, and correlated with each of the main IPV theories. We use two variables that capture both the woman's bargaining power and her partner's status/identity: spousal age and education gaps. Age gap between partners proxies life experience upon entering marriage and correlates with differences in bargaining power (Casterline, Williams, and McDonald 1986). Moreover, men who

Table 1— Correlates of IPV

	IPV index (1)	IPV index (2)	IPV index (3)	IPV index (4)	Mean [SD] (5)
Food budget share	−0.0286 (0.265)	−0.0223 (0.262)	0.193 (0.291)	0.224 (0.308)	0.4921 [0.212]
Shocks	0.191 (0.052)	0.192 (0.051)	0.199 (0.055)	0.212 (0.052)	3.075 [1.446]
Minutes at home (/1,000)	−0.019 (0.311)	0.052 (0.310)	0.002 (0.331)	−0.181 (0.330)	1.103 [0.195]
Woman is main earner		0.274 (0.134)	0.306 (0.145)	0.243 (0.148)	0.285 [0.452]
Age gap (husband-wife)			0.018 (0.013)		6.095 [6.930]
Education gap (husband-wife)			−0.031 (0.017)		2.73 [4.452]
Wife's age				0.002 (0.033)	32.49 [9.559]
Husband's age				0.057 (0.026)	38.9 [12.09]
Wife's age × husband's age				−0.001 (0.001)	
Wife's education				0.063 (0.037)	4.533 [8.283]
Husband's education				−0.019 (0.019)	
Wife's education × husband's education				−0.007 (0.003)	6.447 [4.568]
Intercept	−0.497 (0.396)		−0.725 (0.427)	−1.138 (1.181)	
Observations	657		539	539	

Notes: Robust standard errors are in parentheses. The dependent variable is the standardized IPV index.

marry much younger women may hold more patriarchal views. Education increases potential earnings and therefore captures differences in outside options. The partner's education may also positively correlate with more egalitarian gender views.

We measure whether the woman's income is at least 50 percent of total household income, the minutes she spent at home in the past day, the household food budget share (a proxy for poverty), and the reported number of the following shocks the household experienced in the past 12 months: illness, death, unemployment, business or asset loss, price increase, separation, or displacement.

Table 1 shows the ordinary least squares estimates of the coefficients of the covariates of IPV in our control group. These coefficient estimates

should not be interpreted causally, as IPV is potentially correlated with all outcomes through partner selection or causal effects. Nevertheless, they can suggest possible IPV determinants in this setting and identify women at high IPV risk. This is useful for understanding the possible impacts of various policies on IPV and possible correlates of heterogeneous effects.

Column 1 considers only the food budget share, socioeconomic shocks in the previous 12 months, and minutes the woman spent at home the previous day. Column 2 adds a dummy for the woman being the main earner in the household. We add this variable separately to see whether the coefficients of the other variables are stable.

Column 3 further adds spousal age and education gap, while column 4 considers women's

and men's age and education separately, but it allows for an interaction. Adding age and education reduces the sample size by about 18 percent since these variables are missing for some respondents.

Shocks, being the main earner in the household, and spousal age gap are positively correlated with IPV, while spousal education gap is negatively correlated with IPV. Column 4 further shows that IPV is higher in households with older husbands, and conditional on husband's age, IPV is higher toward younger women. Moreover, IPV is higher in households with more educated women and, conditional on their education, IPV is lower when husbands are more educated. Time spent at home is not a statistically significant correlate of IPV. However, we note the different time intervals for these variables: IPV is measured over the previous year, while time at home is measured over the previous day.

The coefficient estimates are large: IPV is 0.2 standard deviations higher in households that suffered one extra shock, 0.25–0.30 standard deviations higher in households in which the woman is the main earner, and about 0.06 standard deviations higher for each extra year of partner's age or woman's education. These magnitudes suggest that the prevalence of IPV varies considerably across households with different socioeconomic characteristics. The adjusted R^2, however, is at most 0.075, suggesting that most of the IPV variance remains unexplained.

Taken together, these results are consistent with multiple theories of IPV. The findings that shocks are positively correlated with IPV is consistent with the notion that stressful, unexpected negative events may be a trigger for IPV, in line with Card and Dahl (2011).[1]

The positive correlation between IPV and both women's education and main earner dummy are consistent with both the status threat and instrumental views of domestic violence. Women's financial power might increase the

returns to IPV as a means both to assert male dominance and to control partner's finances. The evidence that IPV is higher among older and less educated men, whose views tend to be more patriarchal than those of younger and more educated men, is also consistent with the status threat hypothesis. The evidence for the intrinsic view is inconsistent. If higher bargaining power increased women's ability to lower IPV, we would expect older, more educated, and higher-earning women to experience less IPV, which is not the case in our data.

These findings suggest that the program may lead some participants to experience more IPV by increasing the likelihood of becoming the main earner. Younger, relatively educated women with older and less educated partners may be especially at risk. At the same time, if the program reduces the likelihood of experiencing socioeconomic shocks (or the costs of these shocks), it may lead to lower IPV.

IV. Policy Implications

Predicting the effects of women empowerment policies on IPV is complicated. Any intervention may contemporaneously increase IPV incentives through some channels and decrease them through others, with an ambiguous net effect. Therefore, rather than thinking about the average effects of a program on IPV, we encourage researchers to think in terms of heterogeneous effects. Which groups of recipients might be at risk of higher violence? And what can we do to prevent these negative effects?

Consider our specific example. Women empowerment programs in the Democratic Republic of Congo may increase IPV in some households. Policymakers may choose to devote extra resources to identify at-risk households and target them with increased monitoring or additional interventions, such as working with community members to improve partners' stress-coping, anger management, and communication skills. We are investigating this approach in ongoing research.

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[1] Shocks may increase poverty/scarcity. Therefore, one alternative interpretation of this finding is that poverty and IPV are positively correlated. We rule this out because food share, a proxy for poverty, has no statistically significant correlation with IPV. Moreover, income is *positively* correlated with IPV (results available upon request): a one standard deviation change in income is associated with a 0.08 standard deviation increase in IPV ($p = 0.119$).

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