

Female income generation and intimate partner violence: Evidence from a representative survey in Turkey

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Abstract

Economic empowerment of women is a central strategy to foster economic growth and reduce gendered discrimination. However, it is not yet certain whether the positive impacts extend into domestic violence as theoretical and empirical evidence indicate the possibility of unintentional adverse consequences. We present and analyse new survey data from Turkey. Our results indicate higher risk of intimate partner violence for income-earning women and point to forced rent extraction by male partners as the mechanism. Organizations promoting such empowerment in development contexts should be aware of these potential negative consequences and should plan for steps to mitigate them.

KEYWORDS

female economic empowerment, intimate partner violence, survey, Turkey

1 | INTRODUCTION

Violence against women is a major mechanism through which women are discriminated against and excluded from social, economic, and political life. And, unfortunately, abuse by an intimate partner constitutes its most pervasive form, rendering home the most dangerous place for women. In 48 population-based surveys from around the world, 10% to 70% of women reported being physically assaulted by an intimate male partner at some point in their lives

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(Heise & Garcia-Moreno, 2002). Sadly, for many of these women, physical assault is not an isolated event but part of a continuing pattern of abusive behaviour.

The consequences of IPV are profound and extend beyond the health and happiness of individuals to affect the well-being of entire communities. Domestic violence is the primary cause of homicide deaths for women (Stöckl et al., 2013). Women in violent relationships are more likely to have physical and psychological health problems (Campbell, 2002), and these negative effects are likely to spillover to their offsprings (Aizer, 2011; Carlson, 2000). In short, IPV against women is a global public health and human rights problem.

Economic empowerment of women has increasingly been identified by scholars, policy makers, and international organizations as a central strategy to foster development and to reduce gendered discrimination. Consequently, economic development policies such as microfinance-based interventions, cash transfer programmes, and other forms of livelihood programming that target women have proliferated in recent years. The rationale for the association between women's economic empowerment and social development is well established. The economic empowerment of women boosts productivity, increases economic diversification and income equality (International Monetary Fund, 2018). Inclusion of women in the labour force enriches the pool of talent from which employers can draw, and thereby increases the average ability of the workforce (Esteve-Volart, 2004). Companies greatly benefit from female employment, which is shown to increase organizational effectiveness and growth (McKinsey & Company, 2018). More importantly, women are more likely to invest their financial resources in their children's education (Kabeer & Mahmud, 2004; Roushdy, 2004) and nutrition (Quisumbing & Maluccio, 2003), and in their own reproductive health (Kadir et al., 2003; Schultz, 1990), thus promoting the next generation's human capital.

However, it is not certain whether the positive impacts of economic empowerment extend into domestic violence. A group of studies document protective effects of female financial autonomy: Schuler et al. (1996) and Hashemi et al. (1996) find micro-credit programmes in rural Bangladesh to reduce women's vulnerability to IPV by strengthening their economic roles in the family; Aizer (2010) studies the American case and finds domestic violence against women to decrease as the gender wage gap closes; Vyas et al. (2014) report similar positive effects of paid work among women market traders in Tanzania. On the other hand, studying the effects of a cash transfer programme in Brazil, Litwin et al. (2019) do not find any significant improvement in women's likelihood of IPV victimisation; Similarly, Green et al. (2015) observe no change in IPV likelihoods in response to a poverty reduction programme designed to economically empower Ugandan women; Jewkes et al. (2002) find female employment to be uncorrelated with IPV victimisation in South Africa; Raj et al. (2018) report a similar lack of association in rural India. There is evidence of serious negative effects as well: Vyas et al. (2015) find higher risks of IPV victimisation among income-earning women in Tasmania; Abramsky et al. (2019) report similar findings for women who contribute more to their household budget than their partners; Erten and Keskin (2021) show how in the Turkish case a reduction in employment opportunities for women leads to a decline in IPV by dampening the incentives of men to employ violence for rent extraction; In a recent study on employment and IPV among Mexican women, Torres Munguía and Martínez-Zarzoso (2022) find evidence that a greater degree of job market access for women could be generating IPV risks.

In short, the empirical evidence on the association between IPV and economic empowerment of women is mixed. Review studies by Kabeer (2001), Vyas and Watts (2009), and Eggers Del Campo and Steinert (2022) confirm this inconclusive picture with results indicating associations in both directions. Hence, a complete understanding of how IPV responds to female economic empowerment is still missing.

In this study, we contribute to the formation of that understanding by studying the associations between female economic empowerment and IPV on a new dataset from a representative field survey we conducted in Western Turkey in 2019. Our results indicate that in the Turkish context, women with a personal income are more likely to be abused by their husbands compared to those with no income of their own. We then explore the possible mechanisms behind this association by first discussing the theoretical arguments raised in the literature so far. A detailed literature review gives us five major mechanisms that link female income generation with IPV, namely, the increased bargaining power a working woman might have vis a vis her partner; a wider empowerment through increased awareness and

self-esteem; poverty relief that reduces financial stress and related conflicts in the family; a male backlash to reassert lost power; and increased incentives of partners to use violence for rent extraction. While the first three of these mechanisms predict a negative association between female income and IPV, the last two predict a positive one. Employing our model and data, we test each of these mechanisms in the Turkish case and find evidence that while earning an income does give women some bargaining power, this positive impact is heavily outweighed by incentives for their male partners to use violence for rent extraction.

Our study thus contributes to the literature on the causes and correlates of domestic violence as well as to the growing literature on the impact of economic empowerment of women on their general well-being. To our knowledge, we are the first to offer a thorough empirical examination of the competing mechanisms between economic empowerment and IPV.

Our results once again reveal the complexity of these issues, bring to light the possibility of unintended adverse consequences, and spotlight the need for organizations involved in women's empowerment and in broader development programmes to incorporate mitigating measures that address these potential adverse consequences in their projects.

2 | FEMALE ECONOMIC EMPOWERMENT AND IPV—THE MECHANISMS

Scholars define women's empowerment as the ability of a woman to claim enabling resources, exercise voice and agency, and act on desires to transform her own life in contexts where this ability has been denied (Kabeer, 1999). Accordingly, economic empowerment can be defined as the ability of a woman to claim economic resources and agency. Most empirical works in the literature measure economic empowerment by income and/or employment status.

The literature hosts five broad mechanisms that link female economic empowerment to domestic violence. The first one is the increased bargaining power that women experience in their relations as a result of the additional resources they bring to the household. Economic empowerment is expected to increase a woman's bargaining power in her relationship by improving her outside options, by rendering her financially autonomous and thereby less dependent on her partner, and by enabling her to negotiate change in the relationship and to leave if that change does not occur (Abramsky et al., 2019). Aizer (2010) sums these arguments in a game-theoretical model that predicts a reduction in domestic violence in response to an improvement in labour market conditions for women. Schuler and Nazneen (2018) provide empirical evidence from an in-depth study of interviews conducted with Bangladeshi women.

The second mechanism is the wider empowerment that usually accompanies the economic one. Kumar and Casey (2020) refer to this process as the "spillover of empowerment from one domain to another." Having an income-generating employment is expected to increase women's awareness and self-esteem, and to provide them a social support network (Kishor & Subaiya, 2008; Vyas et al., 2015).

Thirdly, IPV risk may diminish as the additional income reduces poverty related conflict and stress in the family (Jewkes, 2002; Macmillan & Gartner, 1999). Frustration that results from economic hardship may cause a partner to lash out. Abramsky et al. (2019) argue that easing of economic hardship and the dissipation of potential arguments over the man's inability to provide for the family are two major potential pathways through which a woman's income leads to reduced IPV risks.

However, employment may also change relations within the household in a way that increases the incidence of domestic violence. As a husband's ability to control his wife's behaviours through economic resources decreases, he may resort to violence as a recourse (Vyas & Watts, 2009). In other words, female economic empowerment may lead to male backlash if men try to compensate for lost authority by resorting to violence. Abramsky et al. (2019) link this backlash to the gender role strain theory that posits that failing to fulfil the role of provider may lead men to exhibit aggression towards their female partners. Similarly, Jewkes et al. (2002) argue that violence is frequently used by men to

cover up an inability to control women. Tandrayen-Ragoobur (2020) finds evidence for these arguments in Sub-Saharan Africa where results indicate a nearly 20% higher likelihood of IPV victimisation among working women. Macmillan and Gartner (1999) show that the positive association they observe between a woman's employment and her risk of IPV is conditioned by the employment status of the male partner. They argue the mechanism works through men's attempts to coercively control their female partners. Similarly, Heath (2014) argues that husband use violence instrumentally to counteract the increase in bargaining power that women gain through employment. Martín-Lanas et al. (2019) find positive associations between perceived relationship power imbalances and known predictors of IPV. Overall et al.'s (2016) results indicate that men resort to violence when their dependence or their lack of influence on their partner prevent them to negotiate in ways to uphold masculine identities; Manji et al. (2020) show how women's entry into paid work increased partner violence in Tanzania by threatening gender norms.

Finally, instrumental theories of violence predict that income generation by women may increase the incentives of their male partners to use violence as a means of extracting resources from them (Erten & Keskin, 2018). Thus, having an income makes a woman a direct target for a partner seeking to improve his financial position.

In summation, we have increased bargaining power, wider empowerment, poverty relief, male backlash, and increased incentives of men to use violence for rent extraction as the five broad mechanisms that relate female economic empowerment with IPV. We now move on to explore whether and how female income generation is associated with IPV likelihood and look for evidence of these mechanisms in our data.

3 | THE SURVEY

Our data come from a field survey we designed, and with the help of a professional survey company, conducted in Western Turkey in January–April 2019. We interviewed 6397 randomly selected, currently married Turkish women of ages 25 to 50 at their residential addresses. A pilot study with 250 randomly selected participants was conducted before embarking on the main fieldwork.

Our sample was randomly selected via stratified, two-stage clustered sampling by the Turkish Institute of Statistics (TUIK) from 29 districts in Western Turkey.¹ To achieve a representative sample, first a stratified sample of 330 blocs, each of which contained 400 residential addresses, was randomly selected from districts in proportion to district populations. Then, in the second stage, from each bloc a sub-bloc of 20 residential addresses was randomly selected with two replacements for each address. Within each household, the eligible participant was the “lady of the house,” aged between 25 and 50, and currently married.² We restricted the study to currently married respondents because extramarital relationships are disapproved of within the Turkish society.³ This societal pressure may alter the dynamics of the relationship and interact with factors that result in IPV. As such, this very small minority was omitted from the study to ensure homogeneity in the contextual condition of the relationship.

Interviews were conducted in Turkish in private settings by female interviewers trained on interviewing techniques, IPV, and ethical issues related to IPV research. Informed consent was obtained from all participants. Information about counselling and support services was provided to each respondent unless she rejected receiving it. The study was conducted in accordance with WHO recommendations on researching violence against women (Watts et al., 2001). Ethical approvals were received from the European Research Council, and the research ethics committees of the University of Warwick and Sabanci University. Section A.7 in Appendix S1 includes detailed information

¹The eastern districts were excluded from the study because of the ongoing armed conflict in the region, as well as the conflicts in neighboring countries such as Syria and Iraq which have created large refugee and migrant flows into the region. Consequently, the geographical scope of the study includes only those Western districts that have not experienced any major conflict events, with at least 90% of their current resident population born in Western Turkey, and which are representative of the socioeconomic structure of their region.

²Interviewers were trained and equipped to use a Kish grid in households with more than one eligible participant to select one randomly. However, the age and status restrictions coupled with the very high percentage of nuclear family households in the districts we surveyed (more than 90% according to 2019 census data by TUIK) eliminated any such need.

³We simply asked potential respondents whether they were married without imposing any definition on what constitutes a marriage.

on the scientific ethics protocols followed. The response rate, calculated as the number of completed questionnaires divided by the number of addresses in which eligible women had been identified, was 79%.⁴

The questions on IPV, which are presented in Appendix S1, are very similar to those used by the 2005 WHO cross-country survey study (Garcia-Moreno et al., 2005) and are built on the tradition of the Conflict Tactics Scale (Straus et al., 1996). Intimate partner violence (IPV) is defined as any physical, psychological, or sexual harm committed by a partner. Accordingly, respondents were asked whether they have ever experienced certain specific acts of psychological, physical, and sexual violence by their husbands. An affirmative response to at least one item within a component scale is considered as exposure to that form of IPV. Unlike the psychological and the physical violence scales, which include separate questions for various behaviours in those categories, the sexual violence scale includes only one question that subsumes all forced sexual acts. This is a deliberate choice we adopted after our pilot study revealed that most respondents become uncomfortable and feel insulted when asked multiple and detailed questions on their sexual life.

4 | THE ANALYSES

A total of 25.7% of our respondents declared having an income of their own. According to the Turkish Institute of Statistics, the percentage of women in the labour force in Turkey is 31% with female unemployment at 12.6%, which means the percentage of working women in the population is close to our estimate at 27% (TUIK, 2016)

In total, 22.1% of respondents reported having experienced psychological violence; 16.2% reported having experienced physical violence; and 2.9% reported having experienced sexual violence from their husbands. Admittedly, these percentages are lower than the prevalence figures reported in a recent nationwide study conducted by the Turkish Ministry of Family and Social Policies (Yüksel-Kaptanoğlu et al., 2015). This discrepancy stems from three main reasons. The first reason is that our measure is limited to IPV experience within the current marriage whereas the aforementioned study defines it as IPV experience at any time in life. Relatedly, their sample has a broader scope in terms of age and marital status, and includes never married, married, divorced, separated, and widowed women of age 15 to 59, whereas we only sampled currently married women of age 25 to 50.⁵ Finally, the ministry's prevalence estimates are based on a nationwide sample, whereas our sample is representative of Western Turkey only and as such excludes districts in East and Southeast Turkey where IPV prevalence rates are estimated to be much higher (Altınay & Arat, 2009).

We start our analyses with a parsimonious model in which we control for the basic socio-economic characteristics of respondents and their husbands. We control for the respondent's age, her age at marriage, the age difference she has with her husband, whether it was a consensual (vs. arranged) marriage, the number of children she has, education levels of both partners, whether the husband is employed, parental IPV exposure of both partners, respondent's ethnic background (Turkish vs. Kurdish), and regional fixed effects. Unfortunately, 806 respondents declared that they did not know whether their mothers-in-law had suffered from IPV. To make sure that those missing observations do not affect the results, we report the estimates without the *IPV in family of origin of husband* variable as well. The odds ratios estimated in the separate logistic regressions we conducted for each type of IPV measured are presented in Table 1. Our dependent variables in these regressions are binary indicators of whether a respondent

⁴Compared to Europe and North America, survey response rates are usually high in Turkey due to cultural reasons, but we would also like to credit the questionnaire design, the intense and effective interviewer training and the trust and acclaim the public holds for the *partner university* for the welcome we received.

⁵Within the 6397 participants, we have two at age 21, two participants at age 51, and one at 56 (most probably due to some miscommunication on the field or a coding error). Because the survey specifically targeted women of age 25 to 50, we exclude those five observations from our analyses. Our results do not change in any way when they are included. Results are available upon request.

TABLE 1 Main results

	Psychological violence	Psychological violence	Physical violence	Physical violence	Sexual violence	Sexual violence
Female income	1.43*** (4.23)	1.37*** (3.92)	1.22* (1.78)	1.16 (1.45)	1.76*** (2.73)	1.76*** (2.95)
Age	1.01 (0.96)	1.00 (0.60)	1.02*** (2.90)	1.02*** (2.76)	0.99 (-0.72)	1.00 (0.10)
Age at marriage	0.98** (-2.24)	0.98** (-2.20)	0.95*** (-4.50)	0.95*** (-4.40)	0.97 (-1.33)	0.97 (-1.40)
Age difference between partners	1.03*** (2.59)	1.03** (2.51)	1.03** (2.16)	1.02** (2.00)	1.05* (1.93)	1.04** (2.00)
Consensual marriage	0.91 (-1.24)	0.88* (-1.74)	0.94 (-0.65)	0.89 (-1.39)	0.90 (-0.53)	0.85 (-0.84)
Number of kids	1.08** (2.13)	1.11*** (3.22)	1.12*** (2.67)	1.16*** (3.72)	1.05 (0.49)	1.07 (0.73)
Husband's employment status	0.77** (-2.32)	0.72*** (-3.08)	0.89 (-0.84)	0.81 (-1.54)	0.73 (-1.08)	0.86 (-0.54)
Education level	1.01 (0.29)	1.02 (1.04)	0.97 (-1.42)	0.98 (-0.83)	1.04 (0.84)	1.03 (0.82)
Husband's education level	0.91*** (-5.51)	0.90*** (-6.76)	0.93*** (-3.68)	0.91*** (-5.33)	0.90*** (-2.58)	0.88*** (-3.05)
Ethnic background	1.07 (0.40)	1.18 (1.10)	1.30 (1.42)	1.38** (2.14)	0.60 (-1.23)	0.54 (-1.42)
IPV in family of origin	1.39*** (7.58)	1.71*** (13.84)	1.48*** (8.26)	1.81*** (15.41)	1.26*** (2.57)	1.64*** (6.59)
IPV in family of origin of husband	3.25*** (14.41)		3.40*** (12.54)		4.10*** (6.75)	
N	5507	6312	5506	6311	5463	6251

Note: Estimated odd ratios z values in parentheses. Regional fixed effects are not reported. Standard errors are clustered at the neighbourhood (bloc) level.

- ***Significant at the 1% level.
- **Significant at the 5% level.
- *Significant at the 10% level.

has ever been exposed to a certain type of IPV in her current marriage. Accordingly, we use logistic regressions to estimate the following probability model for each type of IPV:

$$P(IPV_i) = \frac{1}{1 + e^{-(\alpha_1 + \beta_1 X_i + \gamma_1 Female\ income_i + \theta_i + \epsilon_i)}} \tag{1}$$

where X is the vector of the basic socio-economic characteristics we list above (viz., age, age at marriage, age difference between partners, consensual marriage indicator, number of children, education levels of both partners, husband's employment status, parental IPV exposure of both partners, and ethnic background), and θ is the vector of regional fixed effects.

The coding of all our variables is described in section A.1 of Appendix S1, and Table A1 presents the descriptive statistics for each.

The results reveal a strong positive association between having an income and the likelihood of psychological and sexual IPV for women. Respondents who have an income of their own are about 40% more likely to have experienced psychological abuse and 75% more likely to have ever experienced sexual abuse from their husbands. The

estimated coefficient for physical IPV is also positive and indicates a 20% jump in the likelihood for income-earning women; however, this result is only significant at the 10% level.

In terms of other correlates, we find that risk of IPV increases with the age gap between husband and wife. Relatedly, women who get married young are at a higher risk of psychological and physical IPV victimization.⁶ The risk increases with the number of kids in the family, which proxies the amount of parental stress. Experiencing psychological IPV is also more likely for women whose husbands are unemployed.

We obtain the most significant and substantial associations for childhood experiences of parental IPV. Women who had experienced parental IPV in their family of origin are more likely to suffer from IPV in their own marriages. More drastically, they are three to four times more likely to experience IPV if their husbands grew up in homes with parental IPV. Husband's education makes an important difference with each level dampening likelihood of IPV by about 10%. Interestingly, women's own education level does not seem to have a significant association with IPV likelihood. As can be seen in the cross correlations we present in Table A2 in Appendix S1, a potential reason for this lack of association might be the correlations we observe between education level and several other controls in our model including income and husband's education level. To further probe into the association between education and IPV likelihood, we present in Table A4 in Appendix S1 the results we obtain when we interact respondents' income with their education level as well as the results we obtain when we control for the difference between husbands and wives in terms of education level. We fail to find a significant interaction between education and income, nor do we observe a significant effect of the educational difference between partners on the likelihood of IPV.

Next, we enrich our model to explore the mechanisms that may be transmitting these associations we observe.

5 | MECHANISMS

As discussed above, five major mechanisms may link female income with IPV. In what follows, we examine each of these mechanisms by first identifying the variables in our data set with which we can measure them. We then develop our statistical model.

We use a structural equation modelling (SEM) approach to analyse whether these variables might be mediating the associations we observe between IPV likelihood and female income as it allows us to visualize and estimate a statistical model that incorporates these hypothesized mechanisms in a comprehensive and integrated manner. SEM is a widely used technique in the social and natural sciences (for an introduction and overview, see Kline, 2015; Pearl, 2012). It builds on the same assumptions as linear regression estimation but as an additional advantage it allows testing for mediation effects with a straightforward assessment of the total effects of variables parsed out into indirect and direct effects.

The first mechanism to be measured and incorporated in our statistical model is the increased bargaining power that women are expected to gain in their relations as a result of the additional resources they bring to the household. We do not have a direct measure of bargaining power as this is in fact a latent concept; however, if this is a valid mechanism, then we should see income-earning women better able to express their preferences and negotiate change in their relationship. Accordingly, in order to test whether this mechanism links female income to IPV likelihood, we derive our measure from a set of questions in which we asked our respondents whether a woman can refuse to have sex with her husband if she does not want it; if her husband does not treat her well; if she does not feel well; if her husband is drunk. The right-to-refuse-sex index is the total number of "Yes" answers a respondent gives. If having an income is to give women bargaining power, then we should expect them to have higher acknowledgment of their right to express their preferences.

⁶We believe the positive association between physical IPV likelihood and age is due to generational differences in culture and gender norms, and the relatively higher emphasis physical violence has received (compared to sexual and psychological IPV) in public discourse.

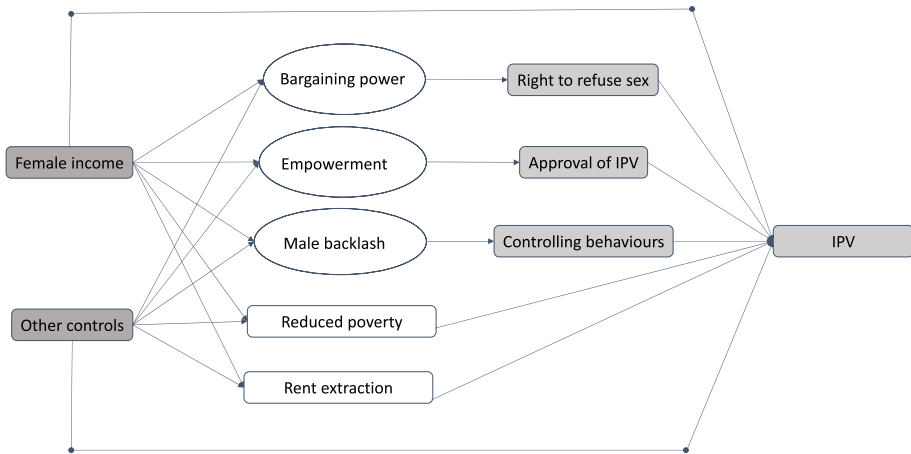


FIGURE 1 The structural equation model of IPV [Colour figure can be viewed at wileyonlinelibrary.com]

Next, we turn to explore the wider empowerment mechanism. Similar to bargaining power, empowerment is also a latent concept. The expectations here are for income to be associated with higher self-esteem and awareness. Our measure of awareness and self-esteem is derived from a scale of 15 questions we asked our respondents on how much they would approve of a husband slapping his wife if she does certain things, such as talking to other men or wearing clothes he does not approve of. We then combined the answers in a weighted average to create an index of approval.⁷ If income is to render women more aware, then we should expect income-earning women to be less accepting of such physical abuse.

To conceptualize and control for male backlash, which is another latent concept, we refer to a scale of 10 questions⁸ on whether their husbands resorted to certain controlling behaviours. If our data offer support for this mechanism, then we expect the husbands of income-earning women to resort to more controlling behaviours to compensate for their lost authority in the relation. Our measure is the total number of “Yes” answers a respondent gives to these questions.

Next, we incorporate into our model the argument that female income generation reduces IPV by helping family finances and reducing poverty and the stress that comes with it. We test this mechanism by incorporating total household income in our model as a mediator. Note that household income is a direct measure of family finances.

We also asked our respondents whether their husbands ever took their money or valuables from them without their consent. This question directly inquires, and thus, provides us with a very good measure of rent extraction. Our measure is a binary indicator that takes on the value 1 for “Yes” and 0 for “No” answers.

Figure 1 depicts the full structural model that incorporates the mediating role of these measures. The circles denote the latent variables in this model.

The coefficients for the paths depicted in Figure 1 are estimated using the *gsem* (generalized structural equation model) setup in Stata 16. The probability (*P*) of experiencing each type of IPV is modelled as a binary variable with a logistic distribution (2); controlling behaviours of the husband (CBH) (5) and the right-to-refuse-sex index (RRS) (3) are modelled as count variables with Poisson distributions; approval of physical IPV (APV) (4) and household income (HI) (6) are modelled as continuous variables with Gaussian distributions; and rent extraction (RE) (7) is modelled as a binary variable with a logistic distribution. More formally, the structural equation model estimates the parameters of the following compound functional form, where *X* is the vector of the control variables included in our original IPV

⁷Detailed information on the scale and how we constructed this index of approval is provided in Section A1 in Appendix S1.

⁸See Section A1 in Appendix S1.

model and θ is the vector of regional fixed effects, under the assumption of potential covariance between observed variables.

$$P(IPV_i) = \frac{1}{1 + e^{-(\alpha_2 + \beta_2 X_i + \gamma_2 \text{Female income}_i + \delta_2 \text{RRS}_i + \lambda_2 \text{APV}_i + \nu_2 \text{CBH}_i + \varphi_2 \text{HI}_i + \sigma_2 \text{RE}_i + \theta_i + \omega_i)}} \quad (2)$$

$$\text{RRS}_i = e^{(\alpha_3 + \beta_3 X_i + \gamma_3 \text{Female income}_i + \theta_i + \eta_i)} \quad (3)$$

$$\text{APV}_i = \alpha_4 + \beta_4 X_i + \gamma_4 \text{Female income}_i + \theta_i + \mu_i \quad (4)$$

$$\text{CBH}_i = e^{(\alpha_5 + \beta_5 X_i + \gamma_5 \text{Female income}_i + \theta_i + \xi_i)} \quad (5)$$

$$\text{HI}_i = \alpha_6 + \beta_6 X_i + \gamma_6 \text{Female income}_i + \theta_i + \varrho_i \quad (6)$$

$$P(\text{RE}_i) = \frac{1}{1 + e^{-(\alpha_7 + \beta_7 X_i + \gamma_7 \text{Female income}_i + \theta_i + \zeta_i)}} \quad (7)$$

where IPV = intimate partner violence of a specific type, RRS = right to refuse sex, APV = approval of physical IPV, CBH = controlling behaviours of husband, HI = Household income, RE = rent extraction, X = vector of socio-economic controls (respondent's age at the time of survey; her age at marriage; the age difference she has with her husband; whether it was a consensual marriage; the number of children she has; education levels of both partners; whether the husband is employed; parental IPV exposure of both partners; and respondent's ethnic background), θ = vector of regional fixed effects.

Table 2 reports the parameter estimates we obtain. For purposes of parsimony and space limitations, we only report the estimated coefficients for female income and for mechanism measures. As results indicate, we find evidence for two of the mechanisms we test.

Income-earning women are more likely to acknowledge their right to refuse to have sex with their husbands, which, we argue, indicates that they have higher bargaining power, and as such, are more able to express their preferences. As the estimated coefficients in the first two columns indicate, women who acknowledge this right are significantly and substantively less likely to report psychological and physical IPV victimization.

Approving attitudes towards physical IPV is positively associated with the likelihood of psychological and physical IPV victimization; however, we do not see a significant association between earning an income and such attitudes. Thus, our results do not lend much empirical support for the wider empowerment mechanism.

Our data offer limited support for the poverty reduction mechanism. Not surprisingly, income-earning women report higher household incomes. We also find higher household income levels to dampen the risk of physical IPV; however, we do not see any significant association with the likelihood of psychological or sexual IPV.

As expected, controlling husbands are significantly more likely to resort to violence against their wives; however, we do not find a significant association between female income generation and husbands' controlling behaviours. Thus, we fail to find much evidence of the male backlash mechanism in our case.

The explanation for why we observe higher IPV victimization among income-earning women in our sample mainly comes with the results we obtain on the rent extraction mechanism. The estimated coefficients indicate that income-earning women are 30% more likely to suffer from "economic violence" from their husbands in the form of forced rent extraction. Our data reveal that among the correlates of IPV likelihood, rent extraction is the one with the most substantial association. Those who suffer such economic violence are nearly eight times more likely to report psychological violence, nearly seven times more likely to report physical violence, and over four times more likely to report sexual violence.

In short, our data present strong empirical evidence for the rent extraction and some evidence for the bargaining power and poverty reduction mechanisms in the Turkish case. We fail to find support for the wider empowerment and male backlash mechanisms.

TABLE 2 Mechanisms

Dependent variables								
	Psychological violence (Logit-odds ratios)	Physical violence (Logit-odds ratios)	Sexual violence (Logit-odds ratios)	Right to refuse sex (Poisson)	Approval of physical IPV (OLS)	Controlling behaviours (Poisson)	Household income (OLS)	Rent extraction (Logit-odds ratios)
Female income	1.67*** (5.06)	1.46*** (3.16)	1.99*** (2.60)	0.02** (2.27)	-0.03 (-1.01)	-0.06 (-1.55)	1.21*** (20.57)	1.35** (2.21)
Right to refuse sex	0.89** (-2.46)	0.89** (-2.16)	0.84 (-1.45)					
Approval of physical IPV	1.11* (1.68)	1.17*** (2.58)	1.17 (1.41)					
Controlling behaviours	1.29*** (11.12)	1.22*** (9.05)	1.42*** (9.14)					
Household income	0.97 (-0.78)	0.90*** (-2.59)	1.03 (0.30)					
Rent extraction	7.83*** (12.44)	6.42*** (12.06)	4.22*** (6.66)					
X	Not reported							
θ	Not reported							
N	5507							

Note: z values in parentheses. All models include controls for age, age at marriage, age difference between partners, consensual marriage, number of kids, husband's employment status, ethnic background and IPV in family of origin, IPV in family of origin, IPV in family of origin of husband, and regional fixed effects. Complete table of results available upon request. Standard errors are clustered at the neighbourhood (bloc) level.

***Significant at the 1% level.

**Significant at the 5% level.

*Significant at the 10% level.

6 | DISCUSSION

Briefly summarizing, our data reveal a positive association between women's involvement in income generation and their likelihood of experiencing IPV in Turkey. In terms of underlying mechanisms, results mainly point to forced rent extraction, which we find to be very substantially and significantly associated with all forms of IPV.

Compared to other middle-income countries, Turkey performs poor in terms of gender equality and has higher rates of domestic violence against women (World Economic Forum, 2015). Scholars have recently started investigating whether female empowerment can help improve this situation in the country. Using data from a 2006 survey, Yilmaz (2018) finds female autonomy, which he defines as participation in household decisions, to reduce the risk of IPV among women in Turkey. Our study reveals that this conclusion cannot be readily generalized to economic autonomy. Dildar (2021) shares our focus on economic empowerment and finds female employment to increase the risk of IPV but also that this is rather due to reverse causality. Yüksel-Kaptanoğlu et al. (2015), on the other hand, find no significant association between women's employment status or property ownership and IPV. Our findings concur with Erten and Keskin (2021) who find an increased likelihood of IPV for income-earning women in Turkey. While they do not empirically explore it, they argue that use of violence by male partners as a means of extracting resources is a likely mechanism deriving their results. In this study, we not only provide new empirical evidence of the positive association between economic empowerment of women and IPV risk, but we also take an important step further and show that it is in fact forced rent extraction by male partners that puts income-earning women under higher risk of IPV victimization. We should also emphasize that, because our sample is representative of Western Turkey where IPV prevalence rates are estimated to be lower compared to other parts of the country (Altınay & Arat, 2009), our estimates are most probably on the conservative side.

Our three key dependent variables—psychological, physical, and sexual violence—are based on the respondent ever having experienced these types of IPV in their current marriage. One of the limitations of this study is that we cannot confirm a sequencing of events. We are not able to show in our analyses a direct timeline from income generation/employment to later abuse. However, we did ask those respondents who reported ever experiencing a certain type of IPV whether they experienced such behaviour within the last year. We present in Table A3 of Appendix S1 the results we obtain when we change our dependent variable from ever experiencing IPV to experiencing IPV in the last year. As can be seen, we still find a positive association between earning an income and IPV victimization.⁹ While constraining IPV experience to last year does not fully guarantee income generation to predate that recent IPV experience, it nonetheless makes it very highly likely to be so. Moreover, a husband would be unlikely to be able to extract money and resources from a partner who had no income of their own. Thus, we believe it likely that the direction of causality would primarily flow from income generation to IPV likelihood rather than the other way around. Our data allow us to provide further support for our belief by testing whether abused women are more likely to be looking for a job. We asked our respondents about their employment status with “looking for a job” as one of the possible answers. If IPV drives women to search for financial independence, then those who indicated that they were looking for a job are expected to be more likely to have suffered from IPV. We first test the association between looking for a job and IPV experience. But because our dependent variable is based on searching for a job at the time of the survey and as such does not include those women who might have already conducted their job search in the past and were not searching anymore either because they have already found a job or because they have given up or have changed their minds, we also test the association between looking for a job and IPV experience in the last year. Finally, we sharpen our investigation even further and test whether younger women (age < 35) who experienced IPV in the last year are searching for a job as the relative scarcity of opportunities in the labour market might deter older women. The results we report in Table A5 in Appendix S1 do not indicate any association between IPV experience (ever or recent) and searching for a job that strengthens our belief that the direction of causality primarily flows from income generation to IPV likelihood.

⁹Not surprisingly, as we report in Table A1, the prevalence of IPV in the last year is much lower than the prevalence of ever experiencing IPV.

Interestingly, a conditioning variable that might intervene in the association between female economic empowerment and IPV is the level of that economic empowerment itself. In other words, the relationship between economic empowerment and IPV might be non-linear with the risk of IPV tracing an inverted-U-shaped path. Based on the work of Jewkes et al. (2002), Schuler and Nazneen (2018) present the theory that a woman's experience of IPV is dependent on her relative level of empowerment. They distinguish between incipient empowerment in which "women's enhanced economic and social roles are viewed as transgressive of gender norms" and normative empowerment in which the economic and social roles are normalized (p. 285). Such theory is further reflected in household bargaining models (Eswaran & Malhotra, 2011; Tauchen et al., 1991), in which women with low initial bargaining power are likely to experience backlash from a male partner to offset their rise in power, while those with high bargaining power to begin with may see a reduction in IPV since working allows the female to flee the marriage.

We test the non-linearity argument by replacing our binary income indicator with *job status* and its squared value in our main model. *Job status* is an alternative indicator of female economic empowerment we derive from our data. It is an ordered categorical variable we constructed by combining the employment status of our respondents with the type of work they do. The variable ranges from 0 to 8 with increasing values indicating higher social status.¹⁰ Note that an inverted-U-shape association implies that the likelihood of IPV increases at a decreasing pace as job status increases and that it should be low for disempowered women as well as for women with high status jobs. We report the results, which indicate possible nonlinearity in the case of psychological and physical violence, in Table A6 in Appendix S1.

One other important point that needs to be emphasized is that, like any other survey study on IPV, what we are observing in the data is a combination of the true prevalence of IPV and a latent willingness to report it (Spangaro et al., 2016). That some women are uncomfortable with the subject and either refuse to talk about or hide/misreport their experiences is a given for any survey study on the subject. Note that it is not possible to objectively observe or measure this willingness to report, however, as long as it is distributed similarly across the different groups of interest, it should not lead to a serious nonresponse or misreporting bias in the results. In our case, this means, willingness to report should not differ significantly between those women with and without a personal income. More specifically, if income-earning women are more likely than women with no income of their own to report their IPV experiences, then this differentiation could be what's driving the positive association we observe in the data between income generation and IPV. Because our nonresponse rates are extremely low for IPV questions, we are not able to directly test this argument by examining nonresponse rates.¹¹ Nonetheless, we do have indirect evidence based on other questions that such a reporting bias is not marring our results. The first piece of evidence that reporting bias is not affecting our results comes from the comparison of women with and without income across their likelihood of refusing to declare their total household income. A higher nonresponse rate amongst those women with no income of their own might be interpreted as a signal that they are less willing to report about their husbands' behaviours and characteristics. However, a simple *t*-test, which we report in Table A7, reveals that, if anything, women with an income are significantly less willing to report their household income. Note that if this unwillingness is also reflected in their responses to IPV questions, then our results are in fact on the conservative side and the positive association between female economic empowerment and IPV experience is even more substantial than what we observe. A similar dampening effect can come from the exclusion of divorced women from our study. IPV is a major reason for marriage dissolution. And, as the bargaining power arguments posit, economically empowered women are more likely and able to exit a marriage when they are abused. In other words, our results are most probably on the conservative side as our sample is excluding a group in which the association between female income and IPV is even stronger.

Our second piece of evidence comes from interviewer reports. We asked our interviewers to fill out a short evaluation form at the end of each interview and indicate whether they thought the respondent was candid in her

¹⁰Information on *job status* and its component variables are given in Section A3 in Appendix S1.

¹¹We only have four (out of 6397) respondents who refused to answer psychological IPV questions, six who refused to answer physical IPV questions, and 64 who refused to answer the sexual IPV question.

responses. Once again, a simple *t*-test, which we report in Table A8 in Appendix S1, reveals no significant difference between the percentage of respondents with and without income in terms of their candidness assessments by interviewers.

7 | CONCLUSION

In September 2015, UN members adopted their 2030 Agenda for Sustainable Development and as part of that agenda, called for the elimination of all forms of discrimination and violence against women. Economic empowerment of women has increasingly been identified by scholars, policy makers, and international organizations as a central strategy to foster development and to reduce gendered discrimination. Many gender and development researchers have argued that this strategy also has the potential to have a positive impact on women's risk of IPV. Our results in this study indicate the opposite. They reveal that the risk is actually higher for income-earning women and that the risk is mainly transmitted through forced rent extraction by husbands.

Our results highlight that female economic empowerment may come with some negative externalities outside of the Western context, in which female empowerment is already beyond the incipient stage for many. In many other contexts, including most developing nations, a push for female economic empowerment may have unintentional adverse consequences for the women being empowered. This is not to suggest that female empowerment does not have many positive externalities as well. Simply put, organizations promoting such empowerment in the development context should be aware of the potential negative consequences and take steps to mitigate them in their project planning and implementation where appropriate.

Apart from shedding light on the dynamics between female economic empowerment and IPV, our results also reveal that domestic violence is mostly explained by learnings and experiences during childhood and adolescence. Parental IPV variables are the most significant and substantial correlates of personal IPV experience indicating that people emulate their parental role models in their own intimate relations. Similarly, gender norms that women hold are very significantly associated with their likelihood of being abused. Those women with accepting attitudes towards gender discrimination and violence are much more likely to be abused themselves. These results we have on norms and parental IPV lead us to think that those values are most probably learned and internalized during childhood and adolescence. The education level of our respondents is also significantly associated with their attitudes towards IPV. Highly educated women have far less accepting attitudes towards physical and sexual abuse. The same conclusion is supported by the significant association we find between IPV likelihood and husbands' parental IPV exposure. Together these results lead us to conclude that elimination of violence against women should not be expected to happen overnight by simply creating jobs for women or providing them with economic resources. Economic empowerment remains insufficient to solve the problem as long as discriminatory norms continue to shape people's behaviour. Rather, what is required is a much broader and society-level developmental approach that first and foremost focuses on the establishment of gender equality norms through inclusive and equitable quality education that ensures girls and boys "not only gain access to and complete education cycles but are empowered equally in and through education" (UNESCO, 2020). While governments hold the main responsibility for the provision of and the right to access such quality education, the latest COVID-19 pandemic has demonstrated that their political will to do so can be quite fragile. Estimates show that an additional 11 million girls may leave school by the end of the COVID crisis; evidence from previous crises suggests that many will not return (UN Women, 2020). The extent of the damage the pandemic is inflicting upon the progress of gender equality clearly demonstrates that female empowerment and elimination of violence against women does, in fact, require a global collaborative effort with the vigilant engagement of the international community, civil society and private sector actors to build political pressure, and to ensure the provision of resources needed to keep governments on track.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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REFERENCES

- Abramsky, T., Lees, S., Stöckl, H., Harvey, S., Kapinga, I., Ranganathan, M., Mshana, G., & Kapiga, S. (2019). Women's income and risk of intimate partner violence: Secondary findings from the MAISHA Cluster randomised trial in North-Western Tanzania. *BMC Public Health*, 19(1), 1108.
- Aizer, A. (2010). The gender wage gap and domestic violence. *American Economic Review*, 100(4), 1847–1859.
- Aizer, A. (2011). Poverty, violence, and health: The impact of domestic violence during pregnancy on newborn health. *The Journal of Human Resources*, 46(3), 518–538.
- Altınay, A. G., & Arat, Y. (2009). *Violence against women in Turkey*. Punto.
- Campbell, J. C. (2002). Health consequences of intimate partner violence. *Lancet*, 359, 1331–1336.
- Carlson, B. E. (2000). Children exposed to intimate partner violence: Research findings and implications for intervention. *Trauma Violence Abuse*, 1, 321–342.
- Dildar, Y. (2021). Is economic empowerment a protective factor against intimate partner violence? Evidence from Turkey. *The European Journal of Development Research*, 33, 1695–1728.
- Eggers Del Campo, I., & Steinert, J. I. (2022). The effect of female economic empowerment interventions on the risk of intimate partner violence: A systematic review and meta-analysis. *Trauma, Violence & Abuse*, 23(3), 810–826.
- Erten, B., & Keskin, P. (2018). For better or for worse?: Education and the prevalence of domestic violence in Turkey. *American Economic Journal: Applied Economics*, 10(1), 64–105.
- Erten, B., & Keskin, P. (2021). Female employment and intimate partner violence: Evidence from Syrian refugee inflows to Turkey. *Journal of Development Economics*, 150(May), 102607.
- Esteve-Volart, B. (2004). *Gender discrimination and growth: Theory and evidence from India*. STICERD Discussion Papers DEDPS42. London School of Economics.
- Eswaran, M., & Malhotra, N. (2011). Domestic violence and women's autonomy in developing countries: Theory and evidence. *Canadian Journal of Economics*, 44(4), 1222–1263.
- García-Moreno, C., Jansen, H. A. F. M., Ellsberg, M., Heise, L., & Watts, C. (2005). WHO multi-country study on women's health and domestic violence against women. In *Initial results on prevalence, health outcomes, and women's responses*. World Health Organization.
- Green, E. P., Blattman, C., Jamison, J., & Annan, J. (2015). Women's entrepreneurship and intimate partner violence: A cluster randomized trial of microenterprise assistance and partner participation in post-conflict Uganda. *Social Science and Medicine*, 133, 177–188.
- Hashemi, S. M., Schuler, S. R., & Riley, A. P. (1996). Rural credit programs and women's empowerment in Bangladesh. *World Development*, 24(4), 635–653.
- Heath, R. (2014). Women's access to labor market opportunities, control of household resources, and domestic violence: Evidence from Bangladesh. *World Development*, 57, 32–46.
- Heise, L., & García-Moreno, C. (2002). Violence by intimate partners. In E. G. Krug, L. L. Dahlberg, J. A. Mercy, A. B. Zwi, & R. Lozano (Eds.), *World report on violence and health* (pp. 87–122). World Health Organization.
- International Monetary Fund. (2018). "Pursuing Women's Economic Empowerment." IMF Policy Papers.
- Jewkes, R. (2002). Intimate partner violence: Causes and prevention. *The Lancet*, 359(9315), 1423–1429.
- Jewkes, R., Levin, J., & Penn-Kekana, L. (2002). Risk factors for domestic violence: Findings from a South African cross-sectional study. *Social Science and Medicine*, 55(9), 1603–1617.
- Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change*, 30(3), 435–464. <https://doi.org/10.1111/1467-7660.00125>
- Kabeer, N. (2001). Conflicts over credit: Re-evaluating the empowerment potential of loans to women in rural Bangladesh. *World Development*, 29(1), 63–84.
- Kabeer, N., & Mahmud, S. (2004). Globalization, gender, and poverty: Bangladeshi women workers in export and local markets. *Journal of International Development*, 16, 93–109.
- Kadir, M., Fikree, F., Khan, A., & Sajan, F. (2003). Do mothers-in-law matter? Family dynamics and fertility decision making in urban squatter settlements of Karachi, Pakistan. *Journal of Biosocial Science*, 35, 545–588.

- Kishor, S., & Subaiya, L. (2008). Understanding women's empowerment: A comparative analysis of demographic and health surveys (DHS) data. In *DHS Comparative Reports 20*. Macro International.
- Kline, R. B. (2015). *Principles and practice of structural equation modelling* (4th ed.). Guilford Press.
- Kumar, S., & Casey, A. (2020). Work and intimate partner violence: Powerful role of work in the empowerment process for middle-class women in abusive relationships. *Community, Work and Family*, 23(1), 1–18.
- Litwin, A., Perova, E., & Reynolds, S. A. (2019). A conditional cash transfer and women's empowerment: Does Bolsa Familia influence intimate partner violence? *Social Science and Medicine*, 238(August), 112462.
- Macmillan, R., & Gartner, R. (1999). When she brings home the bacon: Labor-force participation and the risk of spousal violence against women. *Journal of Marriage and the Family*, 61(4), 947.
- Manji, K., Heise, L., & Cislighi, B. (2020). Couples' economic equilibrium, gender norms and intimate partner violence in Kirumba, Tanzania. *Violence against Women*, 26, 2062–2082. <https://doi.org/10.1177/1077801219895331>
- Martín-Lanas, R., Osorio, A., Anaya-Hamue, E., Cano-Prous, A., & de Irala, J. (2019). Relationship power imbalance and known predictors of intimate partner violence in couples planning to get married: A baseline analysis of the AMAR cohort study. *Journal of Interpersonal Violence*, 36, 10E338–10E10360. <https://doi.org/10.1177/0886260519884681>
- McKinsey & Company. (2018). Women matter: Time to accelerate. Ten years of insights into gender diversity 2018.
- Overall, N., Hammond, M. D., McNulty, J. K., & Finkel, E. (2016). When power shapes interpersonal behavior: Low relationship power predicts men's aggressive responses to low situational power. *Journal of Personality and Social Psychology*, 111(2), 195–217.
- Pearl, J. (2012). The causal foundations of structural equation modeling. In R. H. Hoyle (Ed.), *Handbook of structural equation modeling* (pp. 68–91). Guilford Press.
- Quisumbing, A., & Maluccio, J. A. (2003). Resources at marriage and intrahousehold allocation: Evidence from Bangladesh, Ethiopia, Indonesia, and South Africa. *Oxford Bulletin of Economics and Statistics*, 65(3), 283–327.
- Raj, A., Silverman, J. G., Klugman, J., Saggurti, N., Donta, B., & Shakya, H. B. (2018). Longitudinal analysis of the impact of economic empowerment on risk for intimate partner violence among married women in rural Maharashtra, India. *Social Science & Medicine*, 196(858), 197–203.
- Roushdy R. 2004. "Intrahousehold resource allocation in Egypt: does women's empowerment lead to greater investment in children?" Economic Research Forum (ERF) Working Papers. Working Paper No. 200410. Economic Research Forum: Cairo.
- Schuler, S. R., Hashemi, S. M., Riley, A. P., & Akhter, S. (1996). Credit programs, patriarchy and men's violence against women in rural Bangladesh. *Social Science and Medicine*, 43(12), 1729–1742.
- Schuler, S. R., & Nazneen, S. (2018). Does intimate partner violence decline as women's empowerment becomes normative? Perspectives of Bangladeshi women. *World Development*, 101, 284–292.
- Schultz, T. (1990). Testing the neoclassical model of family labour supply and fertility. *Journal of Human Resources*, 25, 599–634. <https://doi.org/10.2307/145669>
- Spangaro, J., Koziol-McLain, J., Zwi, A., Rutherford, A., Frail, M. A., & Ruane, J. (2016). Deciding to tell: Qualitative configurational analysis of decisions to disclose experience of intimate partner violence in antenatal care. *Social Science and Medicine*, 154, 45–53.
- Stöckl, H., Devries, K., Rotstein, A., Abrahams, N., Campbell, J., Watts, C., & Moreno, C. G. (2013). The global prevalence of intimate partner homicide: A systematic review. *Lancet*, 382(9895), 859–865. [https://doi.org/10.1016/S0140-6736\(13\)61030-2](https://doi.org/10.1016/S0140-6736(13)61030-2)
- Straus, M., Hamby, S., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised conflict tactics scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*, 17, 283–316.
- Tandrayen-Ragoobur, V. (2020). Intimate partner violence and women's labour force participation in Sub Saharan Africa. *Community, Work & Family*, 23(1), 19–43.
- Tauchen, H. V., Witte, D., Ann, L., & Sharon, K. (1991). Domestic violence: A nonrandom affair. *International Economic Review*, 32, 491–511. <https://doi.org/10.2307/2526888>
- Torres Munguía, J. A., & Martínez-Zarzoso, I. (2022). Determinants of emotional intimate partner violence against women and girls with children in Mexican households: An ecological framework. *Journal of Interpersonal Violence*, 0(0), 1–28. <https://doi.org/10.1177/08862605211072179>
- Turkish Institute of Statistics. (2016). İstatistiklerle Kadın retrieved from <http://www.tuik.gov.tr/PreHaberBultenleri.do?sessionId=QHmtYPfcpVgmQgb4TNQH21dZQ0QbP867kRyLQpw5CXGDRmnnfC9!1760913843?id=24643>
- UN Women. (2020). "COVID-19 and its economic toll on women: The story behind the numbers." Retrieved from https://www.unwomen.org/en/news/stories/2020/9/feature-covid-19-economic-impacts-on-women?utm_source=dlvr.it&utm_medium=facebook
- UNESCO. (2020). Education 2030 Agenda. <https://en.unesco.org/themes/education2030-sdg4>
- Vyas, S., Jansen, H. A. F. M., Heise, L., & Mbawambo, J. (2015). Exploring the association between women's access to economic resources and intimate partner violence in Dar Es Salaam and Mbeya, Tanzania. *Social Science and Medicine*, 146, 307–315. <https://doi.org/10.1016/j.socscimed.2015.10.016>

- Vyas, S., Mbwambo, J., & Heise, L. (2014). Women's paid work and intimate partner violence: Insights from Tanzania. *Feminist Economics*, 21(1), 35–58.
- Vyas, S., & Watts, C. (2009). How does economic empowerment affect women's risk of intimate partner violence in low and middle income countries? A systematic review of published evidence. *Journal of International Development*, 21(5), 577–602. <https://doi.org/10.1002/jid.1500>
- Watts, C., Heise, L., Ellsberg, M., & Moreno, C. G. (2001). *Putting women first: Ethical and safety recommendations for research on domestic violence against women*. World Health Organization.
- World Economic Forum. 2015. The Global Gender Gap Report 2015. Retrieved from <https://reports.weforum.org/global-gender-gap-report-2015/>
- Yılmaz, O. (2018). Female autonomy, social norms and intimate partner violence against women in Turkey. *Journal of Development Studies*, 54(8), 1321–1337.
- Yüksel-Kaptanoğlu, İ., Cavlin, A., & Ergocmen, B. A. (2015). *Türkiye'de Kadına Yönelik Aile İçi Şiddet Araştırması*. Hacettepe Üniversitesi. <http://www.hips.hacettepe.edu.tr/KKSATRAraRaporKitap26Mart.pdf>

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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