EGE AKADEMİK BAKIŞ / *EGE ACADEMIC REVIEW*

Cilt 23 • Sayı 4 • Ekim 2023
SS. 667/684
Doi: 10.21121/eab.1317343
Başvuru Tarihi: 20 Haziran 2023 • Kabul Tarihi: 14 Eylül 2023

Article Type: *Research Article*

Male Alcohol Use, Intimate Partner Violence, and Female Autonomy: The Turkish Case

Zeynep ELİTAŞ[1], Hakan ULUCAN[2]

ABSTRACT

This study analyzes the effect of intimate partner violence on female autonomy, defined as the decision-making capability of a woman who is married or cohabiting with a partner, by using Turkish micro-level data sets on domestic violence against women. The study employs the instrumental variable methodology to estimate the causal impact of the occurrence and level of intimate partner violence on female decision-making autonomy. The estimation shows that experiencing intimate partner violence in the last twelve months diminishes the female decision-making autonomy significantly. A further estimation is implemented to find out whether the source of autonomy reduction is employment loss caused by partner violence, which can discourage women from work. IV estimations show that intimate partner violence, instead, pushes women towards work for the sample, which is not restricted to married women. This may indicate that participation in employment is not sufficient alone to ensure freedom in households and should be accompanied by legislative and institutional measures targeting direct prevention of intimate partner violence.

Keywords: Intimate Partner Violence; Female Autonomy; Alcohol Use; Household Bargaining; Instrumental Variable.

JEL Classification Codes: J12, J16, K36

Referencing Style: APA 7

INTRODUCTION

Intimate partner violence is a multidimensional problem, harming both the physical and mental health of its victims (Krug et al., 2002), depriving them of economic resources, disrupting their dignity and liberty (Stark, 2012), and endangering young generations (Aizer, 2011; McCloskey et al., 1995). It distorts human development by damaging women's freedom (Agarwal & Panda, 2007). From a more classical perspective of development, it induces enormous costs on the health and judicial system of countries and leads to GDP loss (UN-Women, 2016; Fearon & Hoeffler, 2014) via its direct and indirect effects (Duvvury et al., 2013).

The problem has become more challenging after the Covid-19 pandemic when couples are isolated to their homes. Reports from all around the world show that the incidents of domestic violence are rising significantly (UN-Women, 2020). The rise in the pandemic indicates that isolation from the outside world to households increased the incidence of the problem. Therefore, the pandemic experience raises the importance of the interactions between household dynamics and domestic violence.

This study analyzes the impact of intimate partner violence on female autonomy. Female autonomy is evaluated by this study as a woman's capability to make decisions without intervention from her husband or intimate partner, based on the Sen's capability approach (Sen, 1999). Sharaunga et al. (2019) evaluate decision-making autonomy as one of the indicators of women empowerment. This capability is also a reflection of the bargaining power of a woman in freedom of making the decisions about herself, as shown in Eswaran and Malhotra (2011). The position of in the household depends on her bargaining power in the household, which is affected by factors such as her real and potential earnings, education level, labor market status, the status of women in society. Autonomy is one of the best indicators of this power. The violence-autonomy relationship has important implications for the intergenerational effects. Women with lower socio-economic status are more likely to fail to obtain enough resources for their children due to low bargaining power in households, leading to problems ranging from malnutrition to undereducation (Smith et al., 2003). Besides, witnessing domestic violence in childhood increases a male's probability of using intimate partner

[1] Asst. Prof. Dr., Labor Economics and Industrial Relations Department, Faculty of Economics and Administrative Sciences, Anadolu University, zeynepelitas @anadolu.edu.tr

[2] Assoc. Prof. Dr., Economics Department, Faculty of Economics and Administrative Sciences, Anadolu University, hakanulucan@anadolu.edu.tr

violence and a female's likelihood of facing intimate partner violence in adulthood (Pollak, 2004).

The main debate in this literature is whether the likelihood of experiencing intimate partner violence is higher for women with lower bargaining power or not. Some game-theoretic models suggest that the likelihood of exit from the relationship is higher for women with higher bargaining power, so the probability of being violated is lower for them (Aizer, 2010; Anderberg et al., 2016). An opposite approach suggests that some men use violence as a bargaining instrument against women with more bargaining power (Eswaran & Malhotra, 2011) or as a way of the male backlash reaction to the higher status of women (Chin, 2012).

The link between intimate partner violence and female autonomy is bi-directional. The estimates ignoring reverse causality suffer from endogeneity bias. In this study, intimate partner violence is instrumented with male partners' alcohol use frequency, demonstrating both theoretical and empirical evidence for the validity of exclusion restrictions. The choice of alcohol use as an instrument is theoretically based on proximal effect models of alcohol use and violence, suggesting that alcohol use directly increases the probability of violence without any mediator variable (Klostermann & Fals-Stewart, 2006; Foran & O'Leary, 2008). Alcohol use directly affects intimate partner violence and is not endogenous for female autonomy. The proximal alcohol models show that alcohol increases the likelihood of intimate partner violence by its nature in the days when her partner uses alcohol. In the day when a male partner uses alcohol, the probability of intimate partner violence increases independently of his partner's autonomy. Then, alcohol use influences autonomy only through violence. Lots of studies relate alcohol-aggression behavior to intoxication harming cognitive abilities to judge the cues from the outside world (Hoaken & Stewart, 2003). Therefore, alcohol use creates a rise in the probability of intimate partner violence, unassociated with the bargaining power and autonomy of a partner. This study uses this variation in order to estimate the causal effect of intimate partner violence on autonomy.

The present study contributes to the literature focusing on the interaction of intimate partner violence and women's bargaining power from several angles. Most of the studies focus on the effect of autonomy on violence, and a relatively small number of studies analyze the effect of violence on autonomy, which is the main research interest of this paper. Besides, this study proposes a novel instrument, alcohol use of males, to capture intimate partner violence shifts to isolate the causal effect on female autonomy from selection bias.

One main contribution is that this study presents evidence from Turkey, which constitutes a unique case which has witnessed a conflict, for a long time, between modernization and patriarchal culture, at the center of which women stand. One of the conflicting fields is the Istanbul Convention on combating violence against women. Although the country signed this convention and took progressive steps in the framework of the convention in the first half of the 2010s, such as the adoption of the law on domestic violence and the foundation of violence prevention centers, the reaction from the patriarchal societies has later on returned to a huge campaign demanding an exit from the convention. Violence prevention centers opened in 14 pilot provinces within the scope of Law No. 6284 on the Protection of the Family and Prevention of Violence against Women have now spread to 81 provinces. Women who have been subjected to violence or are at risk of violence can apply to these centers for consultancy, guidance, and guidance services and empowering and supportive services on the issues they need (Republic of Turkey Ministry of Family and Social Services, 2013).

The estimation results reveal that intimate partner violence reduces female decision-making autonomy by a range from 50 percent to 75 percent, which is in coincidence with the studies based on instrumental theories of violence, suggesting that some males may use violence so as to get control over their partners and household bargaining process against them. The estimations results are robust, performing a slightly low change across specifications. The validity of the instrument is also supported by the correlation coefficients derived from the data.

The study is structured as follows: In the following section, female autonomy and the impact of violence on it are discussed from the perspective of the capability approach. In section 3, the female autonomy and violence relationship is evaluated by focusing on bargaining between the wife and the husband in the household. In Section 4, data and methodological issues are expressed. In Section 5, estimation results are presented. Then, the study ends with concluding remarks and policy evaluations.

CONCEPTUAL FRAMEWORK

Autonomy and Violence Dynamics from the Capability Approach

This study analyzes the freedom deprivation effect of intimate partner violence by specifically focusing on the Turkish women's decision-making autonomy. Decision-making autonomy is women's freedom in choosing between alternatives related to their household and outside life as household members. Then, decision-making autonomy is highly related to Sen (1999)'s concept of capabilities and development, which defines the capability for people to guide their lives according to their own valuations and defines development as the extension of freedoms. According to this definition, female autonomy can be defined as the capability of a woman, who is married or has an intimate partner, in decision making. Agarwal and Panda (2007) suggest that domestic violence is one of the main sources of Sen (1999)'s concept of unfreedom in the household. Therefore, domestic violence creates a significant barrier against Sen (1999)'s concept of development.

The deprivation of decision-making autonomy, a reflection of unfreedom, is one of the first areas in which the negative impact of domestic violence is observed. Nussbaum (2005) suggests that violence threatening the women's body harms the capabilities to use their senses, imagination, and thought. Nussbaum (2005) also states that it has been used to control them, preventing them from using their reasoning and expressing themselves for centuries. Fear of suffering violence plays a key role in the process of deprivation from these capabilities. This study precisely investigates to what extent violence reduces the capability to use their thought by focusing on the impact of violence on decision-making autonomy-capability of married women.

Undermining female's capability, autonomy, and freedom, domestic violence against women is a source of insufficient development, irrespective of which concept of development is used. However, analyzing the violence-autonomy relationship in the capability approach gives a better interpretation of the consequences of domestic violence since there are times that the classical perspective of development becomes short-sighted in evaluating the violence. The capability approach of development shows the negative effect more prominently in a variety of angles. There are times when the mainstream concept of development is left inadequate against domestic violence, which is also itself a form of underdevelopment. For example, the mainstream definition gives too much attention to income increase, and there is an implicit presumption that income increase accomplishes improvements in all other areas. On the other hand, there are cases in which men acted more violently against women achieving higher income in order to seize their income or due to male backlash effects. However, from the capability perspective, it is more important how the increase in income reciprocate in the capabilities of women rather than the income increase itself, which gives a more realistic perspective in the examination of violence and development.

On the other hand, decision-making autonomy is a capability, in Sen (1999)'s notion, that is generally at the target of domestic violence against women, especially in patriarchal societies. Even in the cases, the target of a man is not reducing the decision-making freedom of women, the decision-making autonomy of his partner is destroyed due to domestic violence through various mechanisms, and the negative impact is persistent due to the intergeneration effects caused by children growing in the violent families. Domestic violence directly restricts the capability of freedom to choose among alternatives when men use it to limit certain choices of women, such as whether to participate in social life, whether to work, even what to wear, to whom to communicate with, how to spend her income. Women under such a restriction have very low bargaining power in the household, restricting their capability to join to the decision of how to allocate the household resources.

Agarwal and Panda (2007) define domestic violence as a source of actions harming various dimensions of freedom in the families such as economic freedom, political freedom, and freedom to benefit from social opportunities. As a result of the negative impact on human lives, the development of the country is also harmed by domestic violence. Agarwal and Panda (2007) also indicates the reverse causality by revealing that capabilities, especially relative capabilities in the family, can also affect domestic violence level, which is taken into account in our estimations using the instrumental variable approach.

Autonomy and Violence Relationship from the Bargaining Perspective

There is no consensus on the relationship between female autonomy and intimate partner violence in the literature. According to game-theoretic household bargaining models, intimate partner violence is decreasing in the bargaining power of women. Aizer (2010), for example, states that a labor market with better

potential conditions for a married woman, by improving her potential alternative options, increases her probability of exiting from the marriage when she is violated. Thus, the husband should desist the idea of using violence or give up if he used it before, or reduce the tendency to use violence against a wife with a higher probability of divorce. Anderberg et al. (2016) presents empirical evidence from England and Wales for their household bargaining model, predicting that unemployment of a male reduces the probability of intimate partner violence against females while female unemployment increases it. This is because violent-type males hide their types when they are unemployed and have lower bargaining power relative to their partner. However, when a female partner is unemployed, the violent-type male partner shows no hesitation to expose violence against his partner with relatively low bargaining power. Panda and Agarwal (2005) demonstrate that women who own real estate face a lower possibility of domestic violence.

On the contrary, the models theorizing violence as an instrument to control the household bargaining process for males predict that intimate partner violence may increase when the socioeconomic conditions of women become better. There is evidence that some men use more violence against their partners as their socio-economic status improves because they perceive violence as an instrument to control females (Eswaran & Malhotra, 2011). Eswaran and Malhotra (2011) suggest that a man can increase the violence against his partner when her bargaining power increases if the initial bargaining power is below a certain threshold. In this case, the violence is an instrument for him to gain the upper hand in household bargaining back after the increase in her bargaining power. Bloch and Rao (2002) shows that some men use violence as an instrument against the families of wives to get more dowry payments in India where the families of bribes pays dowry payments to grooms in a way that payments can continue even after marriages. Sometimes, violence is used, not for a specific interest but used to react to higher socio-economic status of a woman, which is perceived as a threat to males' traditional leader role in a country with a patriarchal climate (Chin, 2012). This is called as the male backlash effect.

The evidence from developing countries with strong patriarchal mechanisms is more in support of instrumental and male backlash theories. However, this does not mean that similar mechanisms are completely absent in developed countries. For example, some legislative measures against domestic violence increased domestic violence in the US, as being contrary to the main goal of the regulations (Farmer & Tiefenthaler, 1996; Iyengar, 2009). Farmer and Tiefenthaler (1996) shows that the police and shelter protection can finally increase domestic violence for those who applied to the services but without power and determination to divorce, in order to signal their threat points to their husbands. Dropping the charges in these cases increases the likelihood of intimate partner violence if a husband identifies that the divorce threat is non-credible. In parallel to Farmer and Tiefenthaler (1996), Iyengar (2009) shows that a mandatory arrest law authorizing police to arrest domestic violence suspects without a warrant increased the incidence of domestic violence due to lower reporting of partners' violent behaviors by women and reactionary attitudes by partners. Firstly, women lowered their calls for police in such cases, foreseeing a higher possibility for their husbands to be arrested, unintentionally giving them more room for violence. Secondly, the attempts to apply to the police are reacted more widely by husbands, increasing violence-including its wildest forms like female homicides, since the cost of the police involvement in the case is higher than before.

According to Tumen and Ulucan (2019), a similar failure was experienced in Turkey in two provinces, Adana and Bursa, which hosted the panic button experiment to protect women against domestic violence. The violence increased against those equipped with the button and those who did not have the button but can potentially have the button because of males' backlash reaction against the threat to apply for the panic button. This finding is opposite to the Aizer (2010)-type bargaining models.

By using the discontinuity created by the 1998 education reform increasing mandatory years of schooling from five to eight years, Erten and Keskin (2018) demonstrate that schooling years of the women living in rural areas increased as a result of the reform, but the increase triggered psychological violence against them due to the control seeking behavior of males The results of this study are in line with the studies modeling intimate partner violence as an instrument to gain the upper hand in bargaining with the partner. Erten and Keskin (2020) use the exogenous variation created by the Syrian refugee influx to Turkey, which leads to the exclusion of some Turkish women from informal sector employment as a result of the competition with the Syrian workers. They show that this exclusion reduced the incidence of domestic violence, as instrumental models of violence predict.

Dildar (2020) presents evidence in parallel with Aizer (2010)-type of models predicting that intimate partner violence against women decreases when women's

socio-economic conditions are better. According to the study, earning higher than the partner decreases the risk of intimate partner violence by various amounts for different socio-economic groups. There is a decrease in physical and sexual violence among women from the lower class and a reduction in psychological violence among women from the middle-top class. Another main finding is that although employment is correlated with the incidence of intimate partner violence in the country, there is no causal effect of employment. By considering the bi-directional interaction between domestic violence and autonomy for Turkey, Yilmaz (2018) shows that violence significantly decreases the economic independence of females while violence is lower among the women with higher autonomy.

The literature has generally focused on the effects of intimate partner violence on female autonomy and gives less attention to the variation on autonomy caused by intimate partner violence.

One of the exceptions is Eswaran and Malhotra (2011). According to Eswaran and Malhotra (2011), there is a two-sided relationship between domestic violence and female autonomy. Therefore, estimation of the effect of violence on autonomy may potentially possess a bias stemming from the reverse causality. In order to isolate the effect of the research of interest from this potential bias, they use instrumental variable regression.

Two-way reverse causality between intimate partner violence and female autonomy is also underlined by Fakir et al. (2016). By isolating the effect of autonomy on intimate partner violence from the reverse causality, estimations demonstrate that women with higher autonomy face more events of domestic violence. Based on this finding, they propose measures targeting the other domestic violence determinants rather than increasing women empowerment directly. Anderson and Eswaran (2009) show that the autonomy of females is more sensitive to earned income rather than unearned income. They present evidence from Bangladesh that verifies their hypothesis.

Heath (2012) shows that participating in employment increases the probability of being violated among women with lower initial bargaining power, which is caused by early marriage or low education level. Their husbands react to the increase in their autonomy by using violence. In contrast, a woman with a high baseline bargaining power cannot be violated by their husbands due to their capability to divorce.

Fajardo-Gonzalez (2020) states that being violated urges women to work in Colombia. This effect remains significant after using exogenous variation caused by husbands' exposure of violence in their childhood. As argued by the author, the main mechanism behind this result is that a violated a woman's desire to work is higher to refrain from violence.

There are many studies in the literature that link alcohol use of male partners on intimate partner violence against females. The main model in this literature on which the majority of studies base is the proximal effects model of alcohol on intimate partner violence. The proximal effect models mention that alcohol directly and causally increases the number of violent behaviors.

Leonard and Quigley (1999) show evidence that alcohol directly triggers partner violence in their study, taking into account the other individual risk factors. The main critiques from spurious models of alcohol and violence are that the most part of the co-movement between alcohol use and violence is only a correlation, with the other variables driving the movement of alcohol and violence in the same direction. Indirect models suggest that alcohol has indirect effects triggering some other factors, which play roles in the incidence of domestic violence. As a response to these critiques, proximal models of alcohol presents evidence that the effect of the alcohol on violence remains after controlling all other individual and socio-economic factors that can play a role in the relationship (Klostermann & Fals-Stewart, 2006; Foran & O'Leary, 2008). The timing of violence also shows the direct effect of alcohol on intimate partner violence. Fals-Stewart (2003) shows that the probability of violence increases in the day of drinking of violent males. Luca et al. (2015) examines the effects of alcohol prohibition in India on both male alcohol consumption and domestic violence against females. They show that the prohibition reduced both. Women disproportionately benefited from the prohibition. Karim (2006) shows that the wives of arrack drinkers are violated more than the other families in Bangladesh. Although it is a country where domestic abuse of women is a regular practice, alcohol consumption produces more severe results when it is combined with patriarchal attitudes.

Table 1: Descriptive Statistics

Variables	All		2008		2014	
	Mean	SD	Mean	SD	Mean	SD
The main variables Physical violence	0.085	0.279	0.094	0.291	0.071	0.257
Physical violence (ever)	0.335	0.472	0.357	0.479	0.298	0.457
Autonomy	0.599	0.305	0.590	0.300	0.614	0.312
Current Work Status	0.173	0.378	0.154	0.361	0.206	0.404
Own income	0.208	0.406	0.191	0.393	0.236	0.425
Age	35.303	11.740	34.722	11.700	36.287	11.744
Partner's alcohol use Everyday	0.038	0.166	0.028	0.165	0.028	0.166
Weekly once to twice	0.038	0.193	0.39	0.194	0.037	0.191
1 to 3 times monthly	0.048	0.214	0.049	0.217	0.046	0.210
Less than once monthly	0.072	0.259	0.073	0.261	0.071	0.257
Daily average	0.040	0.168	0.041	0.170	0.039	0.166
IPV ratios wrt. partners' alcohol use IPV-everyday drinkers	0.246	0.431	0.258	0.438	0.222	0.417
Weekly once to twice	0.164	0.371	0.186	0.390	0.127	0.334
1 to 3 times monthly	0.128	0.334	0.126	0.332	0.131	0.338
Non-drinkers	0.090	0.286	0.102	0.303	0.069	0.253
Education (Women) Without a degree	0.215	0.410	0.235	0.424	0.181	0.385
Primary sch.	0.440	0.496	0.451	0.497	0.421	0.493
Middle sch.	0.127	0.333	0.105	0.306	0.166	0.372
High sch.	0.148	0.355	0.148	0.355	0.149	0.356
College	0.065	0.246	0.058	0.234	0.076	0.266
Education (Partner) Without a degree	0.149	0.357	0.153	0.360	0.143	0.350
Primary sch.	0.401	0.490	0.412	0.492	0.382	0.486
Middle sch.	0.130	0.336	0.120	0.325	0.147	0.354
High sch.	0.207	0.405	0.207	0.405	0.207	0.405
College	0.107	0.309	0.102	0.303	0.114	0.318
College plus	0.003	0.062	0.003	0.055	0.005	0.073

Note: The means of the variables employed in the estimations are given in the table.

DATA AND METHODOLOGY

Data

2008 and 2014 releases of the Turkish National Research on Domestic Violence Against Women survey data sets of TurkStat (Turkish Statistical Institute) are used in the study. The data sets provide cross-sectional information on individual and socio-economic characteristics of 20,116 women aged 15-59 in Turkey. [1]The main interested variables in this study, incidence and level of intimate partner violence against women, their husbands' alcohol consumption levels, and women's autonomy in their own decisions are included in the survey. Regarding the violence, the exposure to physical, psychological, sexual, and economic violence by husbands or intimate male partners are asked to the respondent women. If the answer is yes, then the surveyed woman is inquired about the level of violence she faced. This study focuses on the incidence and the level of physical violence, which is the interested type of violence. The survey asks respondent whether her husband or the intimate male partner (1)

[1]Indeed, the raw data include 20,257 women in total. We deleted 141 observations since the province of residence was missing for them.

slapped her or threw an object to her, (2) pulled her hair or pushed/attacked her, (3) punched or struck her with an item, (4) kicked or defeated her, (5) squeezed her or burned a part of her body, and (6) used knife or gun on her or threatened her with these items. The data classifies the violence into two categories with respect to the time of intimate partner violence; intimate partner violence in the lifetime and intimate partner violence in the last 12 months from the survey date. The latter one is the main focus of this study in estimations.

The survey questions the respondent woman about her decision-making autonomy. A similar procedure to Eswaran and Malhotra (2011) is followed in the construction of the female's autonomy variable. A respondent is asked about her autonomy to make decisions without interventions from her partner or husband. Specifically, the survey asks whether the partner or husband intervened her to prevent her from (1) meeting her friends, (2) from seeing her family members, (3) whether he wants information every time about where she is, (4) whether he gets angry when she communicates with other men, (5) whether he forces her to ask permission before she goes to a health center or hospital when she has health problems, and (6) whether he interferes with her clothing. Six autonomy dummy variables are created, corresponding to these six questions. Each dummy takes the value of one if the woman's answer is no, indicating that she can take the corresponding decision by herself. Autonomy dummy on 'the decision to see friends' variable, for instance, takes the value of zero if the woman is intervened by her husband, while it is equal to one if the woman is able to decide without intervention from her husband. The mean of these six variables is employed as an overall autonomy variable. The mean of this variable is equal to 0.60 in the pooled data, while it is equal to 0.59 and 0.61 in 2008 and 2014, respectively.

The survey asks whether the husband or intimate partner drinks alcohol (1) almost every day, (2) once or twice a week, (3) a few times in a month, or (4) less than once a month. Additional variables are created based on the information on whether the women have any income from any source, whether she worked in the last week before the survey, and whether her intimate partner worked in the last week before the survey.

Table 1 presents the main statistics derived from the data. The statistics show that the ratio of females who are physically violated by their partners is 35 percent in 2008 and reduces to a level of around 30 percent in 2014. The ratio of women who experience physical intimate partner violence in the last twelve months is 9 percent in 2008 and 7 percent in 2014. Both general physical violence and last year's physical violence shows a reduction from 2008 to 2014 in the data. The ratio of male partners who drink alcohol every day is around 3 percent in 2008 and 2014. The ratio is around 4 percent for those consuming alcohol on a weekly basis. The intimate partner violence ratio with respect to the alcohol use categories of partners are also shown in the table. The intimate partner violence ratio is highest among the women with everyday drinker partners, with a ratio of around 24 percent in the pooled data. The ratio reduces to 16 percent for women with partners drinking on a weekly basis, while the ratio is 13 percent for those with partners drinking on a monthly basis. The ratio is 9 percent for women with non-drinker partners. This data clearly shows the correlation between the frequency of alcohol use of partners and intimate partner violence.

Methodology

The variation created by alcohol drink habits of male partners is used as an instrument to capture the causal effect of intimate partner violence against women on their autonomy. An instrument should be relevant for the instrumented variable-endogenous regressor, which is violence in this case. It should affect the main dependent variable only through its effects on the violence. This condition is the exclusion restriction, which should be addressed before an IV estimation.

There is no doubt that men's alcohol consumption directly impacts both the incidence and the level of violence against their partners. As shown by the proximal models of alcohol, alcohol urges violent action on its user by distorting the brain's motor function. As a result, it has strong predictive power for both the incidence and the level of domestic violence. The data also supports these theoretical considerations derived from the proximal alcohol model. Empirically, the relevance of the instrument is checked by the F-statistic of the first-stage regression of an IV model, which is required to be at least 10 to ensure the instrument's validity (Angrist & Pischke, 2009). Our first-stage results confirm that the instrument satisfies the F-statistics standard[2].

The only channel through which alcohol use of a partner influences the female autonomy should be violence according to the exclusion restriction. In other words, if there are effects of the instrument on the main dependent variable directly or via other explicit channels

[2] The first stage F-statistics range from 43.13 to 75.24 in our IV regressions.

or unobservables, the results can become questionable. It is highly unlikely to link a female's autonomy directly to her partner's alcohol consumption without referring to the violence. The data used in this study also supports this hypothesis[3]. The number of reasons for the alcohol habits of the male partner to be correlated with the female's autonomy is very limited. The alcohol habits are mostly predetermined from the relationships, and they are highly improbable to change in the dynamics of the partnership. Besides, there are studies arguing that more than 50 percent of alcoholism is explained by genetic factors (Ducci & Goldman, 2008), which are explicitly exogenous for partner's autonomy. Concerning marriages, most marriages in Turkey are arranged marriages due to the country's patriarchal structure, indicating the lack of mechanisms in which women select according to men's alcohol use. As long as it does not systematically match women and men according to their autonomy and alcohol use habits, matching does not violate the exclusion restriction. One other factor that can endanger the estimation results is if the factors connected with the instrument also influence the main outcome variable (see, for example, Acemoglu et al., 2001). In the literature focusing on the relationship between alcohol and intimate partner violence, some models against proximal models suggest that the link between alcohol use and intimate partner violence can be mediated by another variable influencing both, such as age (Foran & O'Leary, 2008). In order to take this issue into account, a set of control variables, including age and age difference with partners, are included in different specifications in order to capture the effects of the other variables that can be correlated with alcohol consumption use and can contaminate the estimated parameter.

$$\mathbf{V}_{i,t,p,r} = \alpha_0 + \alpha_1 X_{i,t,p,r} + \alpha_2 \mathrm{A}_{i,t,p,r} + f_p + f_t + (f_r X f_t) + \omega_{i,t,p,r} \quad (1)$$

$$\mathrm{Y}_{i,t,p,r} = \beta_0 + \beta_1 X_{i,t,p,r} + \beta_{2\ i,t,p,r} + f_p + f_t + (f_r X f_t) + \mathcal{E}_{i,t,p,r} \quad (2)$$

The main econometric specification used in the study is shown by Equation (1) and Equation (2). Equation (1) shows the first stage equation, with A denoting alcohol consumption, which is the instrument used in the estimations. Equation (2) represents second stage estimation, in which the autonomy variable is regressed on the intimate partner violence variable. The subscripts i,t, p, and r denote the women surveyed, year of the survey, province, and region, respectively[4]. Y denotes the autonomy level, X represents the vector of all control variables, and V shows intimate partner violence. fp and fr denote the province and region fixed effects, orderly. ftXfr is included to capture the variation caused by time-region interactions. β2 shows the research interest of this study. Equation (2) is estimated by using OLS and IV. In all estimations, the standard errors are clustered at the provincial level, with 81 clusters. The main equation is estimated by using a variety of specifications. The equations are estimated in 6 specifications, which differ in the included control variables. In specifications (1), (2), (4), and (5), women without partners are excluded from the sample. In specification (3) and (6), unmarried women are also excluded from the sample. In specification (1) the control variables are the age and education degree of the corresponding woman. Specification (2) covers specification (1) and includes the partner's education and an interaction variable of the partner's and the woman's education as control variables. Specification (3) includes the age of the corresponding married woman at the beginning of the relationship and the age difference with the husband. Since these two variables are only available to married women, the sample is restricted to married women in this specification. Specification (4) includes age, education degree of women, education degree of the partner, and a variable denoting whether the women have an income from any source. Specification (5) excludes the income variable, which is included in specification (4) and includes employment variables of the women and the partner, instead. In specification (6), similar to specification (3), the sample is restricted to married women, and new variables, including the woman's age at the beginning of the relationship, the difference with the husband's age, and the number of their children, are included in addition to the variables in the specification (5). The inclusion of the labor market variables and income variables can be criticized by arguing that they are bad controls. Being aware of this,

[3] The correlation coefficients between intimate partner violence and female's autonomy is 0.008, which can indicate a direct relationship between the variables is also weak in the data. On the other hand, the correlation coefficient between physical violence last year and autonomy is -0.136. Very low co-movement of the main variable with the instrument, which is highly correlated with the endogenous regressor, is supportive of the exclusion restriction.

[4] Turkey implements NUTS classification system. Turkey has 81 provinces, which are used to create provincial fixed effects. NUTS-2 definition separates the country into 26 regions by combining several provinces in the same geographical location. The regional fixed effects are constructed with respect to NUTS-2 identification.

these variables are included for checking the robustness of the parameter of interest with respect to different specifications.

RESULTS AND DISCUSSION

The model is firstly estimated through OLS. The estimation results of OLS is shown by Table 2. Table 2 shows that intimate partner violence experienced in the last year reduces women's autonomy by 15 percentage points. The estimated parameters of the effect of violence on autonomy are highly significant and stable across the specifications. However, the OLS results potentially possess a bias, mostly caused by the reverse causality problem between female autonomy and violence. The correlation between autonomy and violence should be negative according to the game-theoretic, Aizer (2010)-type, bargaining models, and, in contrast, can be positive according to the instrumental theories of violence. If the reduction in the autonomy increases the violence furtherly as predicted by the game-theoretic models, the opposite co-movement between them strengthens, indicating that OLS overestimates the negative relationship. On the other hand, if the usage of violence is more of a reaction against the women achieving a recent increase in their bargaining power, the reduction in the autonomy reduces the violence furtherly, indicating that the OLS underestimates the absolute value of the parameter. The latter seems to be the case in Turkey when the OLS results are compared with the IV estimations, which estimates, at least, a three times higher negative effect than OLS. Lower OLS estimation of the coefficient of interest is also reported by Eswaran and Malhotra (2011), in which OLS estimate is significant while the coefficient of interest is -0.88 in IV estimations.

The IV estimations show that the reduction of autonomy caused by physical violence in the last year ranged from 49 to 71 percentage points in the specifications, and all of which are highly significant, as can be seen from Table 3. First stage F-statistics are also available in IV estimation tables, indicating the relevance of the instrument with the values above the threshold level. The minimum reductions are observed in the third and sixth specifications, in which the sample consists of married women, and a set of new variables are added. Specifications (5) and (6) are the estimations with the largest set of control variables. The reduction in the coefficient of interest in specification (3) and (6) mostly stems from the restriction of the sample to married women and the inclusion of the new variables.

The effect of the level of physical violence in the last year is also analyzed by using the IV estimation in this study. Table 4 shows that one unit increase in the number of times of violence diminishes the women's decision-making autonomy by approximately 6 percentage points. The coefficient is more stable across the specifications than the incidence of violence, except specification (2) in which one unit increase in the violence level reduces the autonomy by 7.1 percentage points. Our results are supported by the findings of Eswaran and Malhotra (2011) reporting 88 percent reduction caused by the incidence of domestic violence. Eswaran and Malhotra (2011) also report a rise in the coefficient in the IV estimation compared to the OLS, like this study. The rise is sharper in their estimations from OLS estimate of an insignificant effect to -0.88 in the IV estimate. The results of this study are also in line with Yilmaz (2018) reporting a negative effect of violence on autonomy for the Turkish case.

The estimation results raise some questions about the actions taken by women against the harmful experience. The source of reduction in autonomy may partly be loss of employment caused by violence. Intimate partner violence may reduce the courage of women to participate in economic life. Contrarily, women can start to work to prevent violence. In order to find out, an OLS and an IV estimation are employed by using the first three specifications from autonomy estimation with current work status as the main outcome variable[5]. The OLS estimation results are shown in Table 5 while Table 6 shows the IV estimation results. The findings show that the incidence of domestic violence also urges women to work, although it is not as strong as the effect on autonomy. Table 6 indicates that the incidence of domestic violence increases the probability of working currently by around 35-38 percentage points in as shown by columns 1 and 2. The effect becomes insignificant in specification (3), in which the sample is restricted to the married couples, and the new variables available only for the married ones are included. A possible explanation can be that the decision to work for a married woman is not as easy as a woman cohabiting with a partner, indicating a lower tendency to work. The estimation results show that the source of autonomy reduction is not the work loss caused by intimate partner violence. Indeed, the increase in work in unrestricted sample and autonomy loss, which are experienced simultaneously, may indicate that the participation in economic life is

[5] Partner work status is additionally included in specification (2) and (3) in these estimations. Women's income stutus is excluded.

not sufficient alone to ensure freedom in households. The rise in the likelihood of working after violence is in coincidence with the findings of Fajardo-Gonzalez (2020) reporting a 22.7 percent increase as a result of violence in the last year.

CONCLUSION

This study analyzes the impact of physical intimate partner violence on female autonomy by using a micro-level data set from Turkey. The instrumental variable methodology is used to capture the causal effect by instrumenting the endogenous regressor with the alcohol use frequency of male partners. Results show that the existence of intimate partner violence in the last year reduces female decision-making autonomy dramatically by at least 49 percentage points. The estimation employing the number of physical violence as an endogenous regressor rather than a binary variable of violence shows that each physical partner violence event reduces the autonomy by 6 percentage points. Furthermore, this autonomy reduction is witnessed while women are pushed to work by intimate partner violence.

The first step to be taken to ensure the freedom of women is to free them from domestic violence. In this sense, the results are consistent with the studies analyzing domestic violence in the capability approach and arguing that domestic violence harms women's freedom and, as a result, human development. This study shows that, as long as violence is an option for men, it reduces the autonomy of women, and it can also be used against a woman when she achieves better conditions in terms of income, education, etc. The findings are also in line with instrumental theories and violence in the sense that violence can be used as a tool against a woman's power in the household. This means that an improvement in a female's outside life may not translate itself into the household against the barrier of violence, endangering the returns and sustainability of the improvement. Thus, female empowerment is not enough alone to end the violence cycle, and they must be supported by legislative and institutional measures that directly target the prevention of intimate partner violence. Indeed, Turkey took important steps in this respect in the first part of the 2010s, such as the participation in the Istanbul Convention and the adoption of the law against domestic violence protecting women. After the withdrawal from the convention, the persistence of the law is a consolation for the legal base for the fight against domestic violence, which should be strengthened by additional measures. Our study also shows evidence of the effect of alcohol use on the incidence of domestic violence. Therefore, providing consultancy and educational services for alcohol-related domestic violence by violence prevention centers could be helpful.

Table 2: OLS estimations of the Effect of Occurrence of Partner Violence on Female Autonomy

	Spec.1	Spec.2	Spec.3	Spec.4	Spec.5	Spec.6
Physical violence	-0.136	-0.157	-0.172	-0.147	-0.150	-0.172
	(0.007)***	(0.006)***	(0.006)	-0.006	(0.006)***	(0.006)***
Education (Woman) Primary sch.	0.021	-0.207	0.018	-0.025	-0.025	0.017
	(0.006)***	(0.018)***	(0.005)***	(0.006)***	(0.006)***	(0.005)***
Middle sch.	0.022	-0.324	0.034	-0.031	-0.031	0.033
	(0.011)*	(0.0201)***	(0.011)***	(0.011)***	(0.011)***	(0.010)***
High sch.	0.051	-0.389	0.070	-0.012	-0.010	0.069
	(0.011)***	(0.016)***	(0.009)***	(0.01)	(0.010)	(0.009)***
College	0.098	-0.464	0.124	0.023	0.026	0.125
	(0.012)***	(0.016)***	(0.010)***	(0.012)**	(0.012)**	(0.010)***
College plus	0.179	-0.495	0.184	0.089	0.090	0.183
	(0.039)***	(0.014)***	(0.020)***	(0.026)***	(0.027)***	(0.021)***
Age	Yes	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Province dummies	Yes	Yes	Yes	Yes	Yes	Yes
YearXRegion interactions	Yes	Yes	Yes	Yes	Yes	Yes
Education-(Partner) Primary sch.	-	0.095	-0.001	0.299	0.262	-0.002
		(0.013)***	(0.009)	-0.016	(0.016)***	(0.009)
Middle sch.	-	0.117	0.001	0.339	0.294	-0.0001
		(0.017)***	(0.010)	-0.014	(0.015)***	(0.010)
High sch.	-	0.122	0.012	0.361	0.317	0.010
		(0.016)***	(0.009)	-0.015	(0.016)***	(0.009)
College	-	0.107	0.018	0.384	0.340	0.016
		(0.026)***	(0.011)*	-0.014	(0.015)***	(0.011)
College plus	-	0.342	0.038	0.409	0.356	0.034
		(0.017)***	(0.027)	-0.026	(0.029)***	(0.028)
Own income	-	-	-	0.017	-	-
				(0.004)***	-	
Woman's employment	-	-	-	-	-0.01	-0.002
					(0.004)**	(0.005)
Partner's employment	-	-	-	-	0.071	0.019
					(0.004)***	(0.004)***
Partner'sXWomen's education	No	Yes	No	No	No	No
Initial age	No	No	Yes	No	No	Yes
Age difference	No	No	Yes	No	No	Yes
Fertility	No	No	Yes	No	No	Yes
# of observations	19,443	19,443	15,622	19,443	19,443	15,622
# of clusters	81	81	81	81	81	81
*R*2	0.247	0.246	0.229	0.245	0.243	0.229

Note: The violence variable is created as a dummy variable indicating whether the woman is physically violated by the partner in the last year from the survey date or not. In specifications (3) and (6), the sample is restricted to married women, women with a partner are also included in the rest of the specifications. Standard errors are clustered at province level. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Table 3: IV Estimations of the Effect of Occurrence of Partner Violence on Female Autonomy

	Spec.1	Spec.2	Spec.3	Spec.4	Spec.5	Spec 6
Physical violence	-0.570	-0.712	-0.491	-0.629	-0.624	-0.490
	(0.078)***	(0.094)***	(0.074)***	(0.087)***	(0.086)***	(0.074)***
Education (Woman) Primary sch.	0.010	-0.229	0.015	-0.038	-0.038	0.014
	(0.007)	(0.022)***	(0.006)**	(0.008)***	(0.008)***	(0.006)**
Middle sch.	0.017	-0.360	0.037	-0.036	-0.035	0.036
	(0.013)	(0.023)***	(0.012)***	(0.012)***	(0.012)***	(0.012)***
High sch.	0.026	-0.454	0.064	-0.035	-0.032	0.063
						(0.009)***
	(0.012)**	(0.021)***	(0.009)***	(0.011)***	(0.011)***	
College	0.060	-0.541	.112	-0.011	-0.005	0.112
	(0.016)***	(0.019)***	(0.011)***	(0.014)	(0.014)	(0.011)***
College plus	0.129	-0.582	0.165	0.035	0.04	0.164
	(0.042)***	(0.022)***	(0.019)***	(0.029)	(0.030)	(0.020)***
Education-(Partner) Primary sch.	-	0.104	-.010	0.314	0.281	-0.012
		(0.015)***	(0.009)	(0.019)***	(0.018)***	(0.009)
Middle sch.	-	-0.111	-.012	0.347	0.311	-0.013
		(0.017)***	(0.010)	(0.017)***	(0.017)***	(0.010)
High sch.	-	0.115***	-.005	0.363	0.325	-0.007
		(0.017)***	(0.009)	(0.018)***	(0.018)***	(0.009)
College	-	0.094	-0.003	0.384	0.342	-0.005
		(0.031)***	(0.012)	(0.016)***	(0.017)***	(0.012)
College plus	-	0.892	.035	0.442	0.387	0.031
		(0.094)***	(0.032)	(0.031)***	(0.034)***	(0.032)
Own income	-	-	-	-0.014 (0.004)***	-	-
Woman's employment	-	-	-	-	-0.013	-0.001
					(0.005)**	(0.005)
Partner's employment	-	-	-	-	0.085	0.016
					(0.005)***	(0.005)***
Partner'sXWomen's education	No	Yes	No	No	No	No
Initial age	No	No	Yes	No	No	Yes
Age difference	No	No	Yes	No	No	Yes
Fertility	No	No	Yes	No	No	Yes
F.S. F-stat.	75.24	70.03	61.72	71.85	72.92	61.85
# of observations	19,443	19,443	15,622	19,443	19,443	15,622
# of clusters	81	81	81	81	81	81
*R*2	0.81	0.824	0.880	0.822	0.825	0.881

Note: The violence variable is created as a dummy variable indicating whether the woman is physically violated by the partner in the last year from the survey date or not. In specifications (3) and (6), the sample is restricted to married women, women with a partner are also included in the rest of the specifications. Age, year, province fixed effects and year-region interaction terms are included in all specifications. Standard errors are clustered at province level. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Table 4: IV Estimations of the Effect of the Level of Partner Violence on Female Autonomy

	Spec.1	Spec.2	Spec.3	Spec.4	Spec.5	Spec.6
Physical violence	-0.058	-0.071	-.058	-0.063	-0.063	-0.058
	(0.009)***	(0.010)***	(0.009)***	(0.009)***	(0.009)***	(0.009)
Education (Women) Primary sch.	0.009	-0.209	.013	-0.037	0.037	0.013
	(0.007)	(0.022)***	(0.006)**	(0.007)***	(0.007)***	(0.006)
Middle sch.	0.018	-0.332	.039	-0.033	-0.032	0.037
	(0.013)	(0.022)***	(0.011)***	(0.012)***	(0.012)***	(0.011)
High sch.	0.032	-0.425	.066	-0.028	-0.026	0.065
	(0.011)***	(0.019)***	(0.010)***	(0.010)***	(0.010)**	(0.010)
College	0.072	-0.513	.119	-0.0004	0.003	0.118
	(0.014)***	(0.018)***	(0.011)***	(0.013)	(0.014)	(0.011)
College plus	0.140	-0.540	.169	0.049	0.053	0.167
	(0.042)***	(0.019)***	(0.021)***	(0.027)*	(0.029)*	(0.021)
Education-(Partner) Primary sch.	-	0.100	-.014	0.299	0.268	-0.015
		(0.014)***	(0.010)	(0.017)***	(0.017)***	(0.010)
Middle sch.	-	0.115	-.017	0.329	0.297	-0.018
		(0.017)***	(0.011)	(0.016)***	(0.016)***	(0.011)
High sch.	-	0.116	-.008	0.34	0.311	-0.010
		(0.018)***	(0.010)	(0.016)***	(0.016)***	(0.010)
College	-	0.082	-.003	0.378	0.336	-0.005
		(0.030)***	(0.013)	(0.016)***	(0.016)***	(0.013)
College plus	-	0.318	.019	0.406	0.355	0.016
		(0.027)***	(0.027)	(0.028)***	(0.030)***	(.0028)
Own income	-	-	-	-0.012 (0.005)**	-	-
Woman's employment	-	-	-	-	-0.007	0.002
					(0.005)	(0.005)
Partner's employment	-	-	-	-	0.079	0.015
					(0.005)***	(0.005)
Partner'sXWomen's education	No	Yes	No	No	No	No
Initial age	No	No	Yes	No	No	Yes
Age difference	No	No	Yes	No	No	Yes
Fertility	No	No	Yes	No	No	Yes
F.S. F-stat.	52.08	50.52	43.26	51.16	51.03	43.13
# of observations	19,443	19,443	15,622	19,443	19,443	15,622
# of clusters	81	81	81	81	81	81
*R*2	0.818	0.832	0.874	0.833	0.836	0.874

Note: The violence variable is created as a level variable demonstrating how many times the women face partner violence in the last year. In specifications (3) and (6), the sample is restricted to married women, women with a partner are also included in the rest of the specifications. Age, year, province fixed effects and year-region interaction terms are included in all specifications. Standard errors are clustered at province level. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Table 5: OLS Estimations of the Effect of Partner Violence on Current Work

	Model1	Model2	Model3
Physical violence	-0.006	-0.008	0.006
	(.0087)	(0.008)	(0.008)
Education (Women) Primary sch.	-0.005	0.040	-0.006
	(0.008)	(0.017)**	(0.008)
Middle sch.	-0.008	0.0003	-0.002
	(0.013)	(0.016)	(0.014)
High sch.	0.022	0.042	0.005
	(0.014)	(0.023)*	(0.014)
College	0.267	0.294	0.279
	(0.021)***	(0.050)***	(0.023)***
College plus	0.355	0.588	0.350
	(0.054)***	(0.149)***	(0.082)***
Education-(Partner)			
Primary sch	-	-0.007	-0.003
		(0.011)	(0.012)
Middle sch.	-	-0.038	-0.032
	-	(0.017)**	(0.013)**
High sch.	-	-0.036	-0.036
		(0.017)**	(0.013)***
College	-	-0.071	-0.053
		(0.036)*	(0.017)***
College plus	-	-0.133	-0.0590
		(0.008)***	(0.063)
Own income	-	-	-
Woman's employment	-	-	-
Partner's employment	-	0.058	0.071
		(0.008)***	(0.009)***
Partner'sXWomen's education	No	Yes	No
Initial age	No	No	Yes
Age difference	No	No	Yes
Fertility	No	No	Yes
# of observations	20,116	20,116	20,116
# of clusters	81	81	81
R2	0.094	0.102	0.111

Note: The violence variable is created as a dummy variable indicating whether the woman is physically violated by the partner in the last year from the survey date or not. In specifications (3), the sample is restricted to married women, women with a partner are also included in the rest of the specifications. Age, year, province fixed effects and year-region interaction terms are included in all specifications. Standard errors are clustered at province level. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table 6: IV Estimations of the Effect of Partner Violence on Current Work

	Spec.1	Spec.2	Spec.3
Physical violence	0.356	0.380	0.162
	(0.136)***	(0.143)***	(0.126)
Education (Women) Primary sch.	0.002	0.055	-0.002
	(0.009)	(0.023)**	(0.008)
Middle sch.	-0.006	0.023	-0.001
	(0.013)	(0.019)	(0.013)
High sch.	0.039	0.088	0.016
	(0.017)**	(0.032)***	(0.014)
College	0.299	0.368	0.292
	(0.027)***	(0.053)***	(0.025)**
College plus	0.346	0.649	0.369
	(0.059)***	(0.157)***	(0.077)**
Education-(Partner) Primary sch	-	-0.013	0.000
		(0.011)	(0.012)
Middle sch.	-	-0.034	-0.025
	-	(0.018)*	(0.013)*
High sch.	-	-0.031	-0.025
		(0.019)	(0.013)*
College	-	-0.061	-0.040
		(0.035)*	(0.018)**
College plus	-	-0.5424	-0.054
		(0.141)***	(0.064)
Own income	-	-	-
Woman's employment	-	-	-
Partner's employment	-	0.055	0.072
		(0.008)***	(0.009)***
Partner'sXWomen's education	No	Yes	No
Initial age	No	No	Yes
Age difference	No	No	Yes
Fertility	No	No	Yes
F.S. F-stat.	77.19	70.25	61.64
# of observations	19,443	19,443	15,622
# of clusters	81	81	81
*R*2	0.182	0.188	0.249

Note: The violence variable is created as a dummy variable indicating whether the woman is physically violated by the partner in the last year from the survey date or not. In specifications (3), the sample is restricted to married women, women with a partner are also included in the rest of the specifications. Age, year, province fixed effects and year-region interaction terms are included in all specifications. Standard errors are clustered at province level. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

REFERENCES

Acemoglu, D., Johnson, S., & Robinson, J.A. (2001). The colonial origins of comparative development: An empirical investigation. *American Economic Review*, 91, 1369–1401.

Agarwal, B. & Panda P. (2007). Toward freedom from domestic violence: The neglected obvious. *Journal of Human Development*, 8, 359–388.

Aizer, A. (2010). The gender wage gap and domestic violence. *American Economic Review*, 100, 1847–59.

Aizer, A. (2011). Poverty, violence, and health the impact of domestic violence during pregnancy on newborn health. *Journal of Human Resources*, 46, 518–538.

Anderberg, D., Rainer, H., Wadsworth J., & Wilson T. (2016). Unemployment and domestic violence: Theory and evidence. *The Economic Journal*, 126, 1947–1979.

Anderson, S. & Eswaran M. (2009). What determines female autonomy? Evidence from Bangladesh. *Journal of Development Economics*, 90, 179–191.

Angrist, J. D., & Pischke, J. S. (2009). Mostly harmless econometrics: An empiricist's companion. Princeton University Press.

Bloch, F. & Rao V. (2002). Terror as a bargaining instrument: A case study of dowry violence in rural India. *American Economic Review*, 2, 1029–1043.

Chin, Y.-M. (2012). "Male backlash, bargaining, or exposure reduction?: Women's working status and physical spousal violence in India. *Journal of Population Economics*, 25, 175–200.

Dildar, Y. (2020). Is economic empowerment a protective factor against intimate partner violence? Evidence from Turkey. *The European Journal of Development Research*, 1–34.

Ducci, F. & Goldman D. (2008). Genetic approaches to addiction: genes and alcohol. *Addiction*, 103, 1414–1428.

Duvvury, N., Callan A., Carney P., & Raghavendra S. (2013). Intimate partner violence: Economic costs and implications for growth and development. Gender Equality and Development. Women's voice, agency, and participation research series; no. 3. World Bank, Washington, DC.

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, 64–105.

Erten, B. & Keskin (2020). Female employment and intimate partner violence: Evidence from Syrian refugee inflows to Turkey, IZA Discussion Papers 14066, Institute of Labor Economics (IZA).

Eswaran, M. & Malhotra N. (2011). Domestic violence and women's autonomy in developing countries: theory and evidence. *Canadian Journal of Economics*/Revue canadienne d''economique, 44, 1222–1263.

Fajardo-Gonzalez, J. (2020). Domestic violence, decision-making power, and female employment in Colombia. *Review of Economics of the Household*, 1–22.

Fakir, A. M., Anjum A., Bushra F., & Nawar N. (2016). The endogeneity of domestic violence: Understanding women empowerment through autonomy. *World Development Perspectives*, 2, 34–42.

Fals-Stewart, W. (2003). The occurrence of partner physical aggression on days of alcohol consumption: A longitudinal diary study. *Journal of Consulting and Clinical Psychology*, 71, 41.

Farmer, A. & Tiefenthaler J. (1996). Domestic violence: the value of services as signals. *The American Economic Review*, 86, 274–279.

Fearon, J. & Hoeffler A. (2014). Benefits and costs of the conflict and violence targets for the post-2015 development agenda. *Conflict and Violence Assessment Paper*, Copenhagen Consensus Center: 1–65.

Foran, H. M. & O'Leary K. D. (2008). Alcohol and intimate partner violence: A meta-analytic review. *Clinical Psychology Review*, 28, 1222–1234.

Heath, R. (2012). Women's access to labor market opportunities, control of household resources, and domestic violence, The World Bank.

Hoaken, P. N. & Stewart S. H. (2003). Drugs of abuse and the elicitation of human aggressive behavior. *Addictive Behaviors*, 28, 1533–1554.

Iyengar, R. (2009). Does the certainty of arrest reduce domestic violence? Evidence from mandatory and recommended arrest laws. *Journal of Public Economics*, 93, 85–98.

Karim, K. R. (2006). Men's arrack drinking and domestic violence against women in a Bangladeshi village. *International Quarterly of Community Health Education*, 25, 367–380.

Klostermann, K. C. & Fals-Stewart W. (2006). Intimate partner violence and alcohol use: Exploring the role of drinking in partner violence and its implications for intervention. *Aggression and Violent Behavior*. 11, 587–597.

Krug, E. G., Mercy J. A., Dahlberg L. L., & Zwi A.B. (2002). The world report on violence and health. *The Lancet*, 360, 1083–1088.

Leonard, K. E. & Quigley B. M. (1999). Drinking and marital aggression in newlyweds: An event-based analysis of drinking and the occurrence of husband marital aggression. *Journal of Studies on Alcohol*, 6, 537–545.

Luca, D.; Owens L.E., & Sharma G. (2015). Can alcohol prohibition reduce violence against women? *American Economic Review*, 105, 625–29.

McCloskey, L. A., Figueredo A. J., & Koss M. P. (1995). The effects of systemic family violence on children's mental health. *Child Development*, 66, 1239–1261.

Nussbaum, M. C. (2005). Women's bodies: Violence, security, capabilities. *Journal of Human Development*, 6, 167–183.

Panda, P. & Agarwal B. (2005). Marital violence, human development and women's property status in India. *World Development*, 33, 823–850.

Pollak, R. A. (2004). An intergenerational model of domestic violence. *Journal of Population Economics*, 17, 311–329.

Republic of Turkey Ministry of Family and Social Policies (2014): 2013 Acting Report., Republic of Turkey Ministry of Family and Social Policies.

Sen, A. (1999). Development as freedom. J.T. Roberts, A.B. Hite, & N. Chorev (Ed.), *The globalization and development reader: Perspectives on development and global change* (525-549). Wiley Blackwell.

Sharaunga, S., Mudhara S. M., & Bogale A. (2019). Conceptualisation and measurement of women's empowerment revisited. *Journal of Human Development and Capabilities*, 20, 1–25.

Smith, L. C., Ramakrishnan U., Ndiaye A., Haddad L., & Martorell R. (2003). The importance of women's status for child nutrition in developing countries: International Food Policy Research Institute (Ifpri) research report abstract 131. Food and Nutrition Bulletin, 24, 287–288.

Stark, E. (2012). Looking beyond domestic violence: Policing coercive control. *Journal of Police Crisis Negotiations*, 12, 199–217.

Tumen, S. & Ulucan H. (2019), Empowered or impoverished: The impact of panic buttons on domestic violence. IZA Discussion Papers 12847, Institute of Labor Economics (IZA).

UN-Women, U. (2016). Economic Cost of Violence against Women. A speech by UN Assihjbstant Secretary General and Deputy Executive Director of UN Women.

UN-Women, U. (2020). COVID-19 and ending violence against women and girls. A speech by UN Assistant Secretary General and Deputy Executive Director of UN Women.

Yilmaz, O. (2018). Female autonomy, social norms and intimate partner violence against women in Turkey. *The Journal of Development Studies*, 54, 1321–1337.