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Adjusting to Toxic Husbands: Normalization of Domestic Violence by Women*

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Abstract

One out of three women views intimate partner violence (IPV) as justified, and the rates of IPV approval are significantly higher among women than men. Beyond societal norms and family upbringing, what other factors explain IPV approval among women? We propose a theory that focuses on women's experiences with 'toxic husbands' who display authoritarian attitudes and high proclivity to aggression. Our model highlights a novel mechanism whereby experiencing threatening behavior leads women to adopt fear-induced submission when the perceived risks are high and outside options are low, with IPV approval being a manifestation of internalized submission. Leveraging a population-level natural experiment created by the mandatory conscription system, the military deployment lottery, and the long-running civil conflict in Turkey as an exogenous influence on husband type, we test various predictions from our theory. We find that women whose husbands served in conflict zones are more approving of IPV, even when they have not experienced any. Further evidence supports the mechanism we propose with important implications for the fight against domestic violence.

Keywords: Domestic Violence, Intimate Partner Violence, Armed Conflict, Gender Norms.
JEL Classifications: J12, J16, D13, O15, I15, D74.

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1 Introduction

Intimate partner violence (IPV) is widespread in many parts of the world, resulting in significant psychological and physiological damage to women (WHO, 2013; Duvvury et al., 2013) and imposing significant social and economic costs.[1] According to global estimates in 2018, more than 26% of women aged 15 and older have been subjected to intimate partner violence (IPV)(WHO, 2018).

An extensive literature has investigated factors that enable or exacerbate IPV and evaluated policy options to combat domestic violence against women. However, the factors that influence peoples' views about IPV have received less attention. Views that justify IPV against women are widespread. Societal normalization of such violence is troubling for many reasons. It likely perpetuates domestic violence by lowering the likelihood of effective law enforcement and divorce, reducing men's psychological costs from exerting violence, exacerbating negative peer effects among women and men, as well as contributing to intergenerational persistence of IPV (Collins, 2024). Policies or institutions that proved effective in reducing IPV in a given society might be ineffective in another where IPV is tolerated and women are taught to be submissive. Therefore, understanding who justifies IPV and why is crucial for explaining patterns of victimization and devising social policies to combat IPV.

Interestingly, IPV approval among women are generally higher than among men (Waltermaurer, 2012).[2] This gender gap suggests a need to analyze the role of factors that are unique to women. Above and beyond the influence of societal norms and family upbringing, what else is preventing many women from disapproving IPV, let alone raising their voice and taking action against IPV? Our goal in this paper is to shed light on the mechanisms that govern the adoption of IPV-approving views by women. Specifically, we analyze how women's experiences with potentially 'toxic husbands' can impact their attitudes about IPV. We refer as 'toxic' to those men with authoritarian inclinations and/or aggression and anger-management problems. There is some evidence that such partners can induce greater IPV tolerance among victims of systematic physical IPV (Frezza, 2024). Yet, among women who have never been victims of systematic violence or have not experienced physical violence from their partners, IPV-approving views are also non-negligible.[3] That victimisation has limited explanatory power is also suggested by the

[1] A 2021 report by the EU's European Institute for Gender Equality (EIGE) estimated that gender-based violence against women incurs an estimated cost of over EUR 290 billion in EU-27 countries (i.e. about 2% of EU's GDP). Additionally, intimate partner violence against women is estimated to cost nearly EUR 152 billion.

[2] Results from Demographic and Health Surveys (DHS) in more than 45 countries indicate that 34% of women and 27% of men find IPV justifiable under certain circumstances (Frezza, 2024)

[3] For example, according to a nationally representative 2014 survey on domestic violence in Turkey (Yüksel Kaptanoğlu et al., 2015) about 49 percent of ever-married women aged 25-50 reported not having experienced any form of IPV. Yet, more than 34% of these women consider domestic violence by partners as justified in some situations.

recent trends. While over the last two decades, physical and sexual IPV have generally been declining even in low and middle-income countries, psychological abuse of women has been on the rise in most regions of the world (Ma et al., 2023).

In this paper, we advance and test a more general theory that can explain the variation in IPV-related views, even among women who did not experience any physical IPV (yet), but possibly observed other threatening signals about their partners such as verbal abuse or overall aggression in daily life. Our theory focuses on the characteristics of male partners and relationship dynamics. It highlights how the threatening behaviors of 'toxic husbands' with aggressive and authoritarian tendencies can drive women to a fear-induced submission, especially when the perceived risks of IPV victimization is high and exit options are limited. We claim that such effects do not necessarily arise only after physical violence becomes systematic. Instead, we argue for a more general mechanism: At the beginning of the marriage, women are uncertain about their husband's abusive type. Men with aggression and self-control problems reveal their types over the course of the marriage through various actions ranging from verbal and physical aggression in their daily interactions with people to verbal intimidation, threats and psychological abuse towards their partners. Some of these actions can be early signals that raise wives' perceived risk and fear of physical violence. Elevated fear can push women into pre-emptive submission to husbands' demands. We argue that this behavioural conformity can be accompanied by views that justify that fear and accept physical violence by partners as a legitimate response to gender norm violations.

We formalize our theory through a simple dynamic model of fear-induced submission. In our model, a woman learns more about her husband's innate "type", which determines his propensity to violence, through her experiences of verbal or physical abuse throughout the course of her marriage. At each stage of marriage, the woman has the option to mitigate violence by adopting submissive attitudes or to exit the marriage altogether. To isolate the role of husband's behaviors and attitudes, we introduce a random shock to husband type, which we assume renders a man more likely to develop a toxic type. The model's main prediction is that husband's exposure to random shock boosts the submission rates of married women, most prominently among those with low outside options, and even among those who do not experience physical IPV. We also characterize the temporal dynamics. Specifically, the model predicts the share of married women who engage in submission to grow over time; and signals of aggression to be most strongly associated with submission early in marriage than later on.

Testing these predictions poses several empirical challenges. The main challenge to causal identification is the fact that husband's behaviors and attitudes toward his wife may depend on marriage dynamics and his partner's characteristics that we do not fully observe. To make progress, we need to isolate some variation in husband-specific traits, in our case the husband's

authoritarian and aggressive tendencies, that are influenced by factors external to the relationship dynamics and independent of women's behaviour or characteristics.

To that end, we leverage a population-level natural experiment as a quasi-random shock to husband type. The natural experiment on which our identification strategy rests is created by the strict universal military conscription system in Turkey that mandates every healthy male citizen to serve in the Armed Forces when he comes to age and the random assignment of draftees to service locations all around the country via a deployment lottery right after the completion of a basic training program. Notably, between 1984 and 2011, this strict conscription system drafted 97 percent of all men reaching the age of induction. Our data indicates that 93 percent of those drafted in the period served 15 to 18 months, and after a short training (up to three months), about one-fourth of them were deployed to bases in the east and southeast of the country (the state of emergency (OHAL) zone) as combatants in the deadly armed conflict between the Turkish state and the Kurdistan Workers' Party (PKK) insurgency.

We build on this population-level experiment using two representative surveys conducted in 2019 in western Turkey as part of a broader project on the effects of armed conflict exposure. The first survey, EXPOVIBE-Conscript Veterans (EXPOVIBE-CV) (Kibris, 2020), collected data from a representative sample of 5,024 men conscripted between 1984 and 2011. It provides information on their personal and family characteristics and their military service history in detail. We use it to establish the role of conflict zone service on husband type. The second survey is EXPOVIBE-Intimate Partner Violence (EXPOVIBE-IPV) (Kibris, 2019). It was conducted with 6,384 married women between the ages 25 and 50, representative of wives of married men surveyed in the EXPOVIBE-CV. It contains rich information on their socioeconomic characteristics, experiences of and attitudes towards domestic violence and their husbands' military service location and dates. Both surveys were conducted outside of and away from the conflict areas in order to eliminate the effects of conflict exposure that extend beyond husbands' military service.

Exploiting exogenous variation enabled by the deployment location lottery, we first identify the population average treatment effects (PATE) of exposure to an armed conflict environment on men's attitudes towards the use of violence in everyday life. We find strong evidence that conscript veterans who served in the conflict zone during their time in the armed forces display more aggressive tendencies and are more inclined to resort to physical violence when provoked. They also report a stronger preference for discipline and obedience. The effects are resilient over time, and may be related to traumatic war experiences as well as military socialization.

Then turning to our main question, we show evidence that women in our EXPOVIBE-IPV sample who are married to men with conflict-zone military service exhibit more accepting attitudes towards physical violence by a husband, particularly in response to his wife's transgression of traditional gender norms. These results are robust to accounting for various demographic char-

acteristics of wives and husbands and the nature of the marriage. Most importantly, we show that our results are not merely driven by women who already have a history of IPV exposure.

These findings are consistent with our proposed explanation that women's views on IPV change over the course of a relationship as they learn more about the risk of physical harm their partners pose to them. As the husband's type is gradually revealed during the marriage, wife's behaviors and views adjust. Women interpret their husbands' aggressive and authoritarian tendencies and behavior as signs for systematic physical violence to follow and pre-emptively assume a more submissive attitude in their relationships when faced with such threats, particularly if they have limited chance to exit these abusive relationships.

Our data offer a rich array of further supportive evidence of the predictions of our model. First, women married to husbands who served in the conflict zone (we will refer to such individuals as OHAL veterans) are more likely to report verbal abuse by their partners like cursing, threatening and belittling. Second, conditional on not having faced physical violence by husband so far, facing verbal abuse is also associated with higher tendency to approve of IPV, but much more so during early years of the marriage, and much less so for women who have already been married for several years and thus not experienced physical abuse for an extended period. Third, women married to OHAL veterans are more likely to agree that under certain circumstances, a woman would be too scared to refuse sex with her husband. Although the questions on refusal of sex are deliberately indirect, we take this answer to be informative about, and hence a proxy for, the fear-induced submissiveness of wives. Fourth, being afraid to refuse sex has a strong partial correlation with IPV-tolerant views. Fifth, evidence from a nationally representative IPV survey suggests a similar positive relationship between acceptance of IPV and a more direct self-reported indicator of fear of husband, even after controlling for IPV history.

We discuss two potential objections to an interpretation of our empirical findings as reflecting the causal effect of toxic (i.e., aggressive and authoritarian) husbands on women's attitudes towards gender-based violence. First, since our regression results rely on a sample of married women, survivorship bias from selective divorce can be a problem. To address this issue, we repeat our analysis on various subsamples of women with more limited exit options and predictably unable to exit even after facing IPV. Reassuringly, we find the effects of husbands' conflict exposure to be systematically more evident among this subset of women. This finding is in line with the predictions of our model, but at odds with the idea that selective divorce can explain our empirical findings.

The second possible objection to our causal interpretation is assortative marriage. Most marriages in Turkey happen after men return from mandatory military service (around 91% in our sample of married women). One may, therefore, suspect that conflict deployment, by making men more aggressive and authoritarian, renders them more likely to marry women with greater

tolerance of IPV. While we do not claim to fully rule out this possibility, we present various pieces of evidence that our results are unlikely to be driven by assortative marriage. Finally, we evaluate alternative or complementary causal mechanisms, finding little reason to favor those over our proposed mechanism of fear-induced submission.

Contributions to Related Literature. Our paper directly contributes to the growing literature on the determinants of IPV acceptance. First, we establish a reduced-form causal effect of husband type on IPV attitudes of the wife. Second, we propose and empirically test a novel fear-based mechanism connecting individual IPV attitudes to women's experiences with angry and authoritarian husbands. Previous correlational studies find that women, who have experienced intimate partner violence (IPV), hold more tolerant attitudes toward IPV (Heise and Kotsadam, 2015; García-Moreno et al., 2005). Our paper differs in that we provide causal evidence about the impact of toxic husbands on women's approval of IPV. Leveraging the variation in the minimum legal drinking age within and across Indian states Frezza (2024) provides evidence that prolonged exposure to IPV leads to higher tolerance of IPV. She argues that higher tolerance among victims may develop as a psychological coping strategy. Her argument does not inform the variation in IPV attitudes among women without any history of IPV exposure. Our paper, on the other hand, offers a theory of fear-induced submission and empirical evidence that apply not only to victims of systematic physical IPV but to all married women. The identifying source of variation behind the long-term effects reported in Frezza (2024) is those husbands who use (or rather abuse) alcohol. Our study, in contrast, uses a nationwide quasi-natural experiment, allowing us to leverage exogenous variation in aggression and authoritarian tendencies among a broader and nationally more representative population of husbands. Other recent work on IPV acceptance offer evidence that psychological distress and economic insecurity caused by natural disasters can intensify IPV acceptance among men as well as women (Mavisakalyan et al., 2024). Collins (2024) provides evidence of intergenerational persistence in domestic violence, arguing that the transmission of IPV attitudes from mothers to daughters is a significant driver of this persistence. Another related study investigates whether information provision can be an effective tool to shape peoples' views about IPV (Bermek et al., 2023). The authors provide experimental evidence that 'hard' information, which corrects peoples' misperceptions about the prevalence of victim-blaming social norms, can change individual attitudes toward IPV. Our paper studies how learning about husbands' proclivity to aggression –rather than social norms about IPV– through own experiences during the marriage can shape women's behavior and attitudes on IPV.

Our paper is also linked, more broadly, to an extensive literature on the causes of gender-based violence. A large body of work within this literature tries to understand the factors that affect the risk of IPV against women. Numerous studies focus on factors that can influence

women's exit capacity and bargaining power vis-a-vis their partners (Aizer, 2010; Farmer and Tiefenthaler, 1996; Tauchen et al., 1991), like changes in laws (Brassiolo, 2016; García-Ramos, 2021; Stevenson and Wolfers, 2006; Anderson, 2021; Sanin, 2021), cash transfers and micro-credit to women (Angelucci, 2008; Bobonis et al., 2013; Hidrobo et al., 2016; De and Christian, 2020), wage employment and overall economic independence (Anderberg et al., 2016; Bhalotra et al., 2021; Heath, 2014; Sanin, 2023; Dildar, 2021), and motherhood (Deschamps, 2024). Some studies analyze the role of cultural factors like family structures (Tur-Prats, 2019; Alesina et al., 2021) and unequal gender norms (González and Rodríguez-Planas, 2020; Yilmaz, 2018), while others evaluate the role of recent COVID-19 lockdowns (Asik and Ozen, 2021; Berniell and Facchini, 2021). Some scholars highlight backlash effects, arguing that men may be more willing to use violence against resourceful partners as a way to regain control over household resources (Eswaran and Malhotra, 2011; Bloch and Rao, 2002; Haushofer et al., 2019; Bulte and Lensink, 2019; Chin, 2012; Atkinson et al., 2005; Erten and Keskin, 2018; Field et al., 2021; Guarnieri and Rainer, 2021). Additional research focuses on husbands' background socioeconomic status and life experiences including education, material resources, and risky behavior like alcohol abuse (Luca et al., 2015, 2019) and armed conflict exposure (Cesur and Kibris, 2023; Cesur and Sabia, 2016). In relation to this broad literature, our paper highlights an overlooked benefit of improving women's exit capacity: even when divorce is not exercised in equilibrium, the knowledge that it is a viable option can prevent pre-emptive submission and adoption of IPV-approving views.

Our findings on aggression and authoritarianism talk to the literature on the effects of military service and combat exposure on men's attitudes, preferences, and psychology. Recent works in this literature support our findings. Studying conscript veterans of the Israeli Defence Forces, Grossman et al. (2015) report combat exposure to lead to militarist and intransigent views on conflict resolution. Kibris and Cesur (2024) report similar findings for combat-exposed Turkish veterans. Exploring the effects of peacetime conscription, Navajas et al. (2022) find Argentinian draft veterans to have less tolerant, more disciplined, more politically conservative, more authoritarian, and more belligerent attitudes. Gibbons and Rossi (2022) add sexist attitudes to this list.

Finally, our theoretical model shares common elements with the dynamic lifecycle model in Anderberg et al. (2023). In both papers the critical ingredient is that women are uncertain about the violent nature of their partners and update their beliefs in response to behavioral signals from men. Both models feature divorce as a choice. While Anderberg et al. (2023) focuses on outcomes like fertility and labor supply during the relationship, we abstract from those decisions and instead focus on adoption of submissive attitudes as a risk-mitigation strategy.

The rest of our paper is organized as follows: In the next section we offer a model to formalize our arguments and generate the predictions we take to data. In section 3 we describe the

military deployment lottery that our identification strategy rests on and then introduce the two independent surveys we use along with the main measures we employ in our empirical analysis. Section 4 presents our empirical specifications and discusses the findings. Finally, in section 5 we offer some concluding remarks about the implications of our study.

2 A Model of Fear-induced Submission

We begin by describing how women may learn to adopt submissive attitudes in anticipation of violence from their husbands. Consider a large population (unit mass) of married couples, each consisting of a woman and her husband. At the outset, a fraction π of men are randomly placed in the treatment group T, which in our case corresponds to deployment to conflict zones for military service, while the remaining share $1-\pi$ of men are placed in the control group C and assigned to non-conflict locations. Following treatment, each man randomly acquires a type θ, rendering him either *aggressive* ($\theta = A$) or *nonaggressive* ($\theta = N$). The probability of developing an aggressive type is higher for men who received the treatment:

$$\mu_T = \mathbb{P}(A|T) > \mu_C = \mathbb{P}(A|C).$$

As in Anderberg et al. (2023), the woman is uncertain whether her husband has an aggressive nature, and she updates her beliefs based on her observations of his behaviour. At the start of marriage, women hold heterogeneous prior beliefs that their husband is aggressive, $\mu = \mathbb{P}(A)$, which we assume follow an atomless distribution $F(\mu)$ with support $[0, 1]$. Importantly, we assume that women are not aware that serving in conflict zone influences their husband's propensity for aggression.

Each woman faces decisions across discrete time periods and fully discounts the future. At the start of each period t, a married woman faces two choices: (1) whether to remain married or make the non-reversable decision to divorce and (2) whether or not to adopt submission $S_t \in \{0, 1\}$. We specify that each woman begins nonsubmissive, $S_0 = 0$, which can be relaxed. If she remains in the marriage, then she may experience verbal abuse $V_t \in \{0, 1\}$ and/or physical IPV , $I_t \in \{0, 1\}$.

When a woman adopts submission, she forms attitudes and exhibits behaviors that are compliant to her husband. Her actions are closely aligned with his desires and her norms become deferential to him. Specifically, we assume submission entails adopting behavior that mitigates the risk of abuse and taking a more approving stance towards IPV. We view IPV-approving answers of the women in our survey as a manifestation of these submissive attitudes.[4]

[4]That is, if a woman chose a submissive stance vis-a-vis her husband's demands and restrictions (given the

To summarize the timing, in each period t:

1. Woman chooses either to remain married or divorce.

2. Woman chooses either to submit or behave independently.

3. Woman observes whether or not verbal abuse and/or physical IPV is realized. Then she updates her belief about the husband type $\hat{\mu}_t = \mathbb{P}(A|h_t)$ given the history $h_t = (z_{t'})_{t'<t}$ of the couple's actions $z_{t'}$ by the end of period t.

The likelihood of verbal and physical abuse occurring in a given period of marriage depends on the man's aggression as well as on whether or not the woman has opted for submission. For a woman who opts for submission and whose husband is of type $\theta \in \{N, A\}$, the probability of physical IPV is $0 \leq \underline{p}_\theta < 1$ and the probability of verbal abuse is $0 \leq \underline{q}_\theta < 1$.

Main assumptions. All throughout the analysis, we assume that the likelihood of abuse is larger for a woman who does not adopt submission, with the probability of physical IPV growing to $\bar{p}_\theta \in (\underline{p}_\theta, 1)$ and the probability of verbal abuse becoming $\bar{q}_\theta \in (\underline{q}_\theta, 1)$. This assumption does not necessarily imply that women's non-submissive behavior is a fundamental cause of IPV. It could very well be that behaviors, which do not conform with a husband's conception of gender-roles, are simply used as a pretext and provide the husband with more frequent opportunities to initiate or escalate violence. Under this interpretation, the main drivers of IPV can be external influences on the husband's tendency for violence. Our second main assumption is that an aggressive man is more likely to engage in abuse than a non-aggressive man: $f_A \geq f_N$ for each $f \in \{\underline{p}, \bar{p}, \underline{q}, \bar{q}\}$.

Each period the woman remains married she receives a value of $v > 0$. Each experience of physical IPV incurs a cost of $c > 0$. For ease of exposition, we treat verbal aggression as costless for the woman, though a cost can be introduced with no qualitative effect on the results. In this formulation, experiencing verbal abuse serves a purely informational role, offering the woman insight into her husband's capacity for aggression. Switching from being non-submissive to being submissive or vice versa incurs a one-time fixed cost of $s > 0$.[5] This can be interpreted as a psychological cost associated with a damage to her integrity, self-respect or social image when she changes her default behavior or other costs she incurs when adjusting to a new reality.[6]

expected costs to non-submission and her exit options), she is more likely to approve submissive behavior by hypothetical women under similar conditions and hence more likely to normalize punishment of non-submissive behavior.

[5]We might also include an additional cost of $\hat{s} > 0$ to be incurred by the woman *each* period that she behaves submissively. Clearly, if $\hat{s}$ is large, then no submission will ever take place. If it is small enough, then introducing it produces no qualitative effect on the results.

[6]The main implication of the switching cost is that once a woman opts for a behavioral change, within that

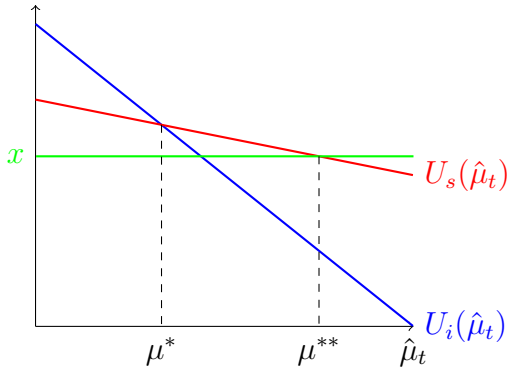


Figure 1: Woman's expected utility from becoming submissive U_s, remaining independent U_i, and taking the outside option x varying with her beliefs about her husband $\hat{\mu}_t$.

We take $\bar{p}_N - \underline{p}_N < s/c < \bar{p}_A - \underline{p}_A$ so that a woman's preference between submission and non-submission depends non-trivially on her beliefs about her husband's type. If the woman chooses to divorce, she takes an *outside option* $x \in \mathbb{R}$ and the interaction concludes. For our analysis, we vary the outside option to analyze how it influences the likelihood of submission. Throughout, we maintain that $x < \bar{x} := v - c \cdot \max\{\underline{p}_A, \bar{p}_N\}$. As we conceptualize of both $\bar{p}_N$ and $\underline{p}_A$ as small, $\bar{x}$ can be thought of as close to v. The woman's utility in a given period t at which she is called to act can thus be written as

$$u_t = \begin{cases} v - s \cdot |S_t - S_{t-1}| - c \cdot I_t, & \text{if married} \\ x & \text{if divorced} \end{cases}$$

2.1 Predictions

Given the history h_t of the couple's actions by the end of period $t-1$, the woman revises her beliefs about her husband's type to $\hat{\mu}_t = \mathbb{P}(A|h_t)$. Consider the options available to a woman who has remained nonsubmissive in her marriage up until this point. The expected utility from remaining married and nonsubmissive is $U_i(\hat{\mu}_t) = v - c \cdot (\hat{\mu}_t \cdot \bar{p}_A + (1 - \hat{\mu}_t) \cdot \bar{p}_N)$, while adopting submission gives $U_s(\hat{\mu}_t) = v - s - c \cdot \left(\hat{\mu}_t \cdot \underline{p}_A + (1 - \hat{\mu}_t) \cdot \underline{p}_N\right)$, and exiting the marriage yields x.

Figure 1 illustrates how the woman's expected utility (measured on the vertical axis) varies in her beliefs (given on the horizontal axis). Let μ^* denote the belief at which the woman is indifferent between submission and independence $U_s(\mu^*) = U_i(\mu^*)$, and μ^{**} the belief at which she is indifferent between submission and exiting the marriage, $U_s(\mu^{**}) = x$ (set $\mu^{**} = 1$ if submission is always more desirable). Notice that if $x > u^* := U_s(\mu^*)$, then submission is never optimal. Given our focus on submission, we maintain that $x < u^*$ throughout. A woman

relationship, she will not switch back to her previous behavior. We believe this pattern is common to most relationships.

will therefore remain nonsubmissive within her marriage in period t if her belief $\hat{\mu}_t$ lies below μ^*, become submissive if her belief lies between μ^* and μ^{**}, and exit the marriage if her belief exceeds μ^{**}.

2.1.1 Learned Submission

Over the course of marriage, a woman interacts with her husband, learns more about him, and may come to adjust her attitudes and behavior. While some women live freely and independently in their relationship, others develop fear of their husband after experiencing bouts of either verbal of physical abuse. Some of these women may respond to this fear by adopting a submissive attitude towards him. For our first result, we document how the share of married women who submit to their husbands evolves of the life cycle of the marriage. Let $\rho_t(x, \tau)$ denote the fraction of married women who opt for submission in period t given outside option x and husband treatment status $\tau \in \{T, C\}$. All proofs can be found in Appendix B.

Proposition 1. *Among married women, the submission rate grows larger over the length of the marriage:* $\rho_{t+1}(x, \tau) > \rho_t(x, \tau)$ *for all* t*, both* $\tau \in \{T, C\}$.

The idea is simple and illustrates the basic mechanism by which women learn to adjust their behavior in response to acquired fear of their husbands. Firstly, given the above conditions, once a woman has decided to undergo costly submission, there is no incentive to either incur the cost again and revert back to non-submission nor to exit the marriage. What is more, each period, some share of women will grow sufficiently fearful of their husbands, leading them to undergo submission themselves. Taken together, along with the fact that the total number of married women is itself nonincreasing, yields the result.

2.1.2 Effect of Husband's Conflict Zone Exposure on Wife's Submission

Our core interest in this paper is to understand the "treatment effect" in terms of identifying the connection between conflict zone exposure by a woman's husband and her propensity to adopt submission. We use the following to capture the treatment effect.

Definition 1. *The effect of conflict zone exposure on submission is:*

$$\Delta_t(x) = \rho_t(x, T) - \rho_t(x, C).$$

That is, $\Delta_t(x)$ is a measure taking values between -1 and 1 that captures the impact of spousal conflict zone exposure on submission rates among women who have been married for t periods and have outside option x. With this measure in hand, we now state our prediction regarding the effect of treatment.

Proposition 2. *The effect of conflict zone exposure on submission is positive:* $\Delta_t(x) > 0$ *for all* $t \geq 2$.

What drives this result is that conflict zone exposure gives men a greater chance of developing aggressive traits, and aggressive men are the more likely to dole out abuse on their wives, leading them to capitulate into submission. Under natural conditions, we can give more detail about how the magnitude of the treatment effect develops over the length of marriage. Broadly, the measured treatment effect will be increasing in marriage length.

Corollary 1. *If a non-aggressive man is relatively non-abusive (*$\bar{q}_N$ *and* $\bar{p}_N$ *small), then the effect of conflict zone exposure on submission,* $\Delta_t(x)$*, increases over the length of the marriage.*

The model also suggests that the measured treatment effect will present itself differently for women who vary in their options to exit the marriage. Larger outside options render submission relatively less desirable, yielding the following result.

Corollary 2. *The effect of conflict zone exposure on submission,* $\Delta_t(x)$*, vanishes for large outside options,* $x \to u^*$.

Another distinguishing feature of our learning model, is that women who have not experienced physical IPV themselves may still learn to adopt a submissive behavior because they anticipate a threat of violence from their husbands. To capture this, suppose that a woman who experiences verbal abuse but no physical IPV becomes more pessimistic about her husband's type than before. This updating behavior happens if the following condition holds:

$$\frac{\bar{q}_A}{\bar{q}_N} \cdot \frac{1-\bar{p}_A}{1-\bar{p}_N} > 1. \tag{A}$$

This condition is satisfied if for a non-submissive woman the objective probability of experiencing only verbal abuse in a given period is higher if her husband is aggressive than if he is non-aggressive.[7]

Among married women who did not experience physical IPV up until period t, let $\rho_t(x, \tau|\text{No IPV})$ denote the fraction who have opted for submission (as of period t), given the woman's outside option x and the treatment status of her husband $\tau \in \{T, C\}$. Let $\Delta_t(x|\text{No IPV}) = \rho_t(x, T|\text{No IPV}) - \rho_t(x, C|\text{No IPV})$

Corollary 3 (Anticipatory Submission)**.** *Given condition (A), the effect of conflict zone exposure on submission among married women without physical IPV history is positive:* $\Delta_t(x|No\ IPV) > 0$ *for all* $t \geq 2$.

[7]Intuitively, this condition implies that being an aggressive type diminishes a husband's ability to stop his urge for verbal aggression more strongly than his ability to control his tendency for physical violence.

Condition (A) ensures that a woman whose independent behavior is consistently met with repeated verbal abuse but *not* IPV will still eventually engage in submission. Given that husbands with conflict zone exposure are more likely to be of aggressive type and hence more likely engage in verbal abuse, Corollary 3 follows.

2.1.3 The Role of Verbal Abuse as an Early Signal of Physical IPV Risk

For the next result, we look at the limiting case in which abuse is most likely to occur from an aggressive husband when his wife is non-submissive:

$$\underline{p}_\theta = \underline{q}_\theta = \bar{p}_N = 0, \text{ for both } \theta \in \{A, N\}. \tag{B}$$

Let $\rho_t(x, \tau|$ No IPV, verbal) and $\rho_t(x, \tau|$ No IPV, no verbal) denote the shares of submitters among married women (as of period t) with the indicated violence history, given the woman's outside option x and the treatment status of her husband $\tau \in \{T, C\}$. In both expressions we focus on women without a history of physical IPV. The first one, however, conditions on some verbal abuse history while the second one focuses on women without any verbal abuse experience. Thus, the effect of verbal abuse on submission among women with no physical IPV history is

$$\hat{\Delta}_t(x, \tau) = \rho_t(x, \tau| \text{ No IPV, verbal}) - \rho_t(x, \tau| \text{ No IPV, no verbal})$$

Proposition 3. *Given condition (B) and as $\bar{q}_N \to 0$, for women with no physical IPV history and a low outside option, the effect of verbal abuse on submission is larger early in marriage (after one period) than it is late in marriage (as $t \to \infty$).*

In fact, early in the marriage, the relationship between verbal abuse and IPV approval is positive, $\hat{\Delta}_t(x, \tau) > 0$ while later on in marriage it becomes negative, $\hat{\Delta}_t(x, \tau) < 0$. Essentially, early on in marriage, experiencing verbal abuse pushes a woman's beliefs considerably towards viewing her husband as aggressive. Thus, most women who experience verbal abuse at the start will submit. However, later on in marriage, the marginal effect of experiencing verbal abuse on a non-submissive woman's beliefs will become relatively smaller. Hence, later in marriage those women who have experienced verbal abuse will be those who have decided to remain non-submissive in their marriages.

3 Empirical Methodology and Data

To test our theory of fear-induced submission and IPV approval we leverage a particular source of quasi-random variation in husbands' tendency for aggression; namely the Turkish military

deployment lottery coupled with a protracted civil conflict in the south eastern part of the country. The next subsection provides a brief summary of the civil conflict and describes the institutional details of the deployment lottery that exposed some military conscripts to armed conflict and spared others. Then we describe in some detail the two main surveys we use and describe the main variables we employ in our empirical analyses.

3.1 Turkish Military Deployment Lottery

Since 1984, Turkey has been suffering from an insurgency campaign led by the Kurdistan Workers' Party (PKK). First founded as a separatist guerrilla organization with the goal of establishing an independent Kurdish state in south-eastern Turkey, the PKK has shifted its political agenda during the 90s towards a more moderate goal of a federational structure that would grant more autonomy to the region.

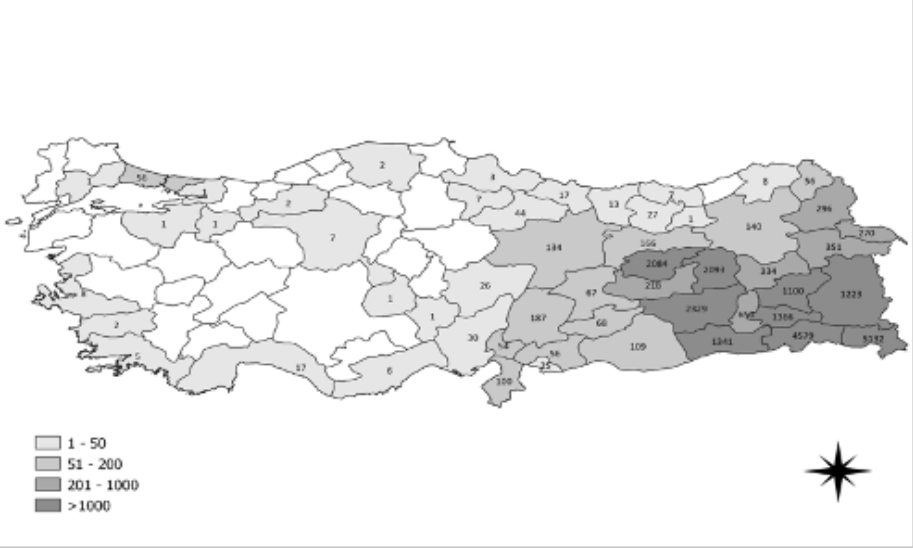


Figure 2: Distribution of combatant casualties, 1984-2018

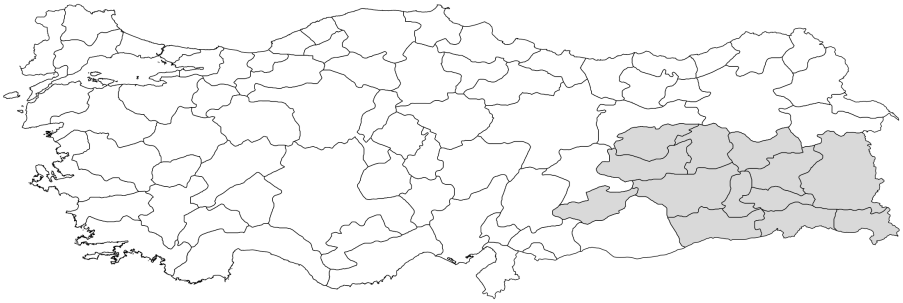


Figure 3: The state of emergency (OHAL) zone

The ongoing protracted civil conflict claimed many lives including civilians and combatants. Figure 2 shows the geographical distribution of total combatant casualties over the 1984-2018 period (about 25,000 in total with a third on the Turkish armed forces side and two thirds on the PKK side) and demonstrates the geographical concentration of the conflict in the areas claimed by the PKK as the ethnic homeland of the Kurds (Kibris, 2021).

In response to ever-increasing violence, the Turkish authorities declared a state of emergency (*Olaganustu Hal* (OHAL) in Turkish) in these areas which constitute the epicenter of the conflict, placing it under military rule (Official Gazette, 1987). The OHAL region, as mapped in Figure 3, spans some 13 provinces in southeast Turkey (Adıyaman, Batman, Bingöl, Bitlis, Diyarbakır, Elazığ, Hakkari, Mardin, Muş, Siirt, Şırnak, Tunceli, and Van) and officially designates the conflict zone(Official Gazette, 1987; Öztan and B., 2015).

Alongside this long-running conflict, Turkey also has a mandatory conscription system which drafts nearly half a million young men every year. One receives the draft call when he turns 20, and typically gets inducted before the age of 22 (Official Gazette, 1927, 2019). The duration of service within the 1984-2011 period ranged between 15 to 18 months. Those called are required to register with the Military Enrollment Services of the Turkish Defense Ministry which then assigns them to branches, military occupation classifications, and accordingly, to training centers for basic training of 1 to 3 months. Detailed information on this classification step can be found on the official instruction brochures for prospective draftees which we present in the Appendix. These instructions emphasize that the classification is conducted electronically on anonymized records and is conditional on the educational qualifications of draftees to meet the needs of the Armed Forces across its branches and tasks.

Upon completion of training, conscripts get deployed to military bases all over the country, except their home provinces, to serve their terms. Our identification strategy relies on the natural experiment which stems from the military's assignment system that leaves draftees no discretion over where they get deployed. Instead, deployments are conducted via a lottery-based random matching between the draftees and military bases, conditional on the needs of the Armed Forces across its branches and tasks, and on the province of official registration of draftees (Official Gazette, 1927, 2019; Mater, 1999).[8] This system is publicly known as the "base lottery", and as the lotteries were conducted in public, recordings of these lotteries can still be found on social media outlets (see https://www.youtube.com/watch?v=D3w4i07_Wj4 as an example).

One important feature of the system we should note is that it incorporates a differentiation based on education level. First, while everyone gets the draft call at the age of 20, those in higher education are allowed to postpone enlistment until they graduate (given that they do so

[8]Mater interviews 42 ex-conscripts who had been deployed to intense conflict areas during their service. The interviews contain frequent references to the "lottery".

before they turn 30). Second, while all draftees with less than a college degree serve full-terms as rank-and-file soldiers, college graduates serve either as full-term sub-lieutenant officers or they serve half-term as rank-and-file depending on the needs of the Armed Forces in that draft period. Having said that, our estimates in the EXPOVIBE-CV show that 93 percent of conscripted men served between 15 and 18 months, that is, those who serve half-term constitute only a small share of the relevant population. What is most important for our purposes is that college-educated individuals remain subject to the lottery-based assignment system regardless of their rank and service duration.

Military conscription is a widely used institution around the world. However, where there has been mandated service, a significant share of the eligible population has had the option to avoid service or to serve in civilian services (e.g., for religious ground in Israel, conscientious objection in Armenia, compulsory community service in Austria). Turkey offers an important exception which, from an empirical point of view, rules out self-selection into service and ensures that the drafted men are representative of the adult male population. With a strict penal code and a strong set of social norms that heavily shun and punish evaders, Turkish men find themselves with negligibly limited options to avoid or circumvent the draft (Altınay, 2012). The state takes strong actions, including imprisonment up to three years, against draft evaders and anyone who helps them.[9] Because male employees are legally required to provide official military discharge papers to their employers upon hiring, evaders cannot hold paid employment either. Avoiding duty due to a health ailment is also rare because it is only allowed in the case of seriously debilitating and well-documented health problems and it requires approvals from multiple state institutions.[10] Similarly, once inducted, any discontinuity in service, excluding rare health exemptions, is considered desertion and is punishable by imprisonment for up to five years.[11] However, one may still question if men can avoid deployment to the conflict zone by dodging the draft, manipulating their service location, or influencing the timing of induction. To address any such concerns, we perform formal balance tests to confirm our identifying assumptions. It is also important to note that because service involves serious risks for those deployed to the conflict zone, the fairness of the deployment system has always been under scrutiny by the public, and accordingly, has carried substantial political costs. Consequently, the Turkish Ministry of Defence and the General Staff emphasize in all their communications that the system does not discriminate. The non-discriminatory nature of the system is also supported by the fact that the

[9]The Military Penal Code enacted by the law number 1632 states that evading service is punishable by up to three years in prison, and employing a fugitive is punishable by up to two years in prison.

[10]Those with serious health problems are given exemption if the diagnosis is approved by a panel of military doctors. What constitutes "a serious health problem" is defined in the Health Capability Regulations of the Turkish Armed Forces (Official Gazette, 2015).

[11]The Military Penal Code, https://www.mevzuat.gov.tr/mevzuatmetin/1.3.1632.pdf

list of fallen soldiers in the conflict zone includes close relatives of high-level politicians and army officials.[12] Also, the Armed Forces has long been the most trusted institution in Turkey, which attests to the positive perception of the public with regard to the fairness of military practices (Esmer, 1999; Adaman et al., 2005).

Between 1984 and 2011, Turkey's strictly enforced universal conscription system drafted nearly every male (97 percent, i.e., roughly 14 million) at draft age, and as the EXPOVIBE-CV data indicate, deployed about one-fourth (i.e., nearly 3.5 million) of them to bases in the conflict zone.[13]

3.2 Data and Measures

Our data come from the EXPOVIBE Intimate Partner Violence (EXPOVIBE-IPV) and the EXPOVIBE Conscript Veterans (EXPOVIBE-CV) surveys conducted in 2019 as face-to-face interviews at randomly selected residential addresses in 29 provinces in western Turkey, outside of and with negligible in-migration from the conflict zone to capture isolated exposure during military service without confoundment by civilian experiences.[14] The sampling of both surveys mimics each other and was performed by the Turkish Statistical Institute (TurkStat). The TurkStat maintains Turkey's national address-based census registry system. From this registry, which constitutes our sampling frame, residential addresses were randomly drawn in proportion to province populations to finalize the EXPOVIBE-CV and EXPOVIBE-IPV samples, respectively. We provide detailed information on sampling procedures and scientific ethics protocols in Appendix C.

The surveys were designed to investigate the causal effects of armed conflict exposure. While the random deployment of conscripted men enables causal identification, the sampling distribution on western provinces that are away and with negligible in-migration from the conflict areas warrant the elimination of the conflation of exposure during service from that of civilian experiences and other possible conflict-induced changes in the socioeconomic environment. We, therefore, capture the impact of isolated exposure to conflict during military service as conscripts returned to their peaceful hometowns upon discharge. By construction, the same sampling strategy also rules out the potential confounding effects of women's exposure to violence as civilians.

[12] A recent example is the (then) secretary of state Mr. Babacan whose cousin died in 2007 in a PKK attack on the Çeltikli outpost in Bitlis while doing his military service. Similarly, one of the 42 OHAL veterans Mater Mater (1999) interviews in her book is the son of a high-level military official.

[13] We focus on the 1984-2011 period because the nature of mandatory military service changed with new legislation enacted in late 2011. Accordingly, after 2011, the Turkish military started recruiting professional soldiers on fixed-term contracts to replace conscripts, especially in the conflict zone, as part of a move towards a professional army (Official Gazette, 2011). With professional soldiers in place, civilians were granted the option to pay to reduce their service to basic training only.

[14] Appendix Figure A.3 shows the geographic distribution of respondents in the two surveys.

The EXPOVIBE-CV was conducted with 5,024 draft veterans, all male by definition. The survey questionnaire was designed to collect information on military service details, including the branch of service, military occupation, rank, training and service location and length, along with a wide range of personal and family characteristics, attitudes, and behaviors besides military experiences. At each randomly selected address, the eligible participant was the "man of the house" who completed his military duty between 1984 and 2011. Participation rate was 83%. To make our analysis of husband type representative for our study of women's acceptance of IPV, the main regressions on EXPOVIBE-CV sample will focus on the subset of men who are married to 25-50 years old women. Table A.8 in the Appendix presents summary statistics for all relevant variables in that subsample.

The EXPOVIBE-IPV survey was conducted with randomly selected 6,384 married women between the ages 25 and 50 to collect information on their views and experiences of IPV, personal and family characteristics, and their husbands' basic military service history, including the year of induction, deployment province, and service duration. The age restriction was introduced based on the average age differential in married couples in Turkey to maximize the likelihood of reaching out to women whose husbands were conscripted in the 1984-2011 period. Participation rate was 79%.

Although the sampling strategy is common to both, the samples of the two surveys are nonetheless independent of each other. This is a deliberate design choice made in light of the sensitive subject matter of the EXPOVIBE-IPV. In line with the standards promoted by the World Health Organization and the recommendations of the scientific ethics board of the EXPOVIBE project, reaching women through their husbands in a household survey was eliminated as a design option to minimize any potential threats to the well-being of the participant women as well as the likely response biases such threats could introduce (World Health Organization, 2001). Instead, the EXPOVIBE-IPV surveyed a sample of women expected to be representative of the wives of married men surveyed in the EXPOVIBE-CV.

Conscription service is culturally highly revered and considered an essential part of male gender identity and patriotism in Turkish culture (Altınay, 2012). Moreover, as a significant and challenging experience for nearly every male, memories from compulsory military service are extensively discussed in family and friend circles. Therefore, wives are typically well-informed about their husbands' service history. Confirming this argument, 97.5% of respondents answered the questions regarding their husbands' conscription basics. About 89% of respondents had husbands enlisted between 1984 and 2011.[15] We conduct our analysis with these 5,495 EXPOVIBE-IPV respondents whose husbands were conscripted between 1984 and 2011, with

[15]Including women whose husbands were conscripted before 1984 or after 2011 has no bearing on our estimates. These results are available upon request.

non-missing information on their marriage timing and husbands' service history.

Approval of physical IPV. Our measures of IPV approval are derived from a group of survey questions in EXPOVIBE-IPV that require the respondent to indicate on a 5-point scale how much she agrees with a husband slapping his wife under 15 different scenarios concerning gender norm transgressions. In that sense, these questions capture not only respondents' moral views about violence towards women but also the acceptability of domestic violence in different contexts. The questions gauge whether respondents find physical violence by a husband justified *if the woman talks to her husband in a way that annoys him; if she does not do what her husband tells her; if she argues with her husband even though he told her to be quiet; if she constantly criticizes her husband; if she behaves in public in a way that her husband does not approve of; if she does not treat her husband's family as he wishes; if she talks to other men; if she refuses to do the housework or to cook; if she goes out without asking her husband; if she does not look after her children well; if she lies to her husband; if she meets her family without asking for her husband's permission; if she wears clothes that her husband does not approve of; if she spends money without asking her husband; if she cheats on her husband.* Thus, the answers are likely affected by various considerations, including the dominant norms about gender relations and the acceptability of physical violence as a method of resolving conflicts in a society (Haushofer et al., 2020), as well as the respondents' approval of these norms. In our main regressions, we use a composite IPV approval index that is computed as the inverse covariance weighted average of the 15 underlying answers (measured on the 5-point Likert scale and standardized) (Anderson, 2008).

Physical IPV Experience of Women. EXPOVIBE-IPV also includes data on the IPV history of respondents. The respondents were surveyed about their experiences employing questions similar to those used by the 2006 WHO cross-country study (Garcia-Moreno et al., 2006) and are built on the tradition of the Conflict Tactics Scale (Straus et al., 1996). To capture physical IPV experiences, the respondents were asked whether they had ever experienced the following physical acts of violence by their husbands, respectively:

Has your husband ever slapped you in the face?; Has your husband ever pushed or scratched you or pulled your hair?; Has your husband ever punched, kicked, or beat you?; Has your husband ever used or threatened to use a knife or gun against you?

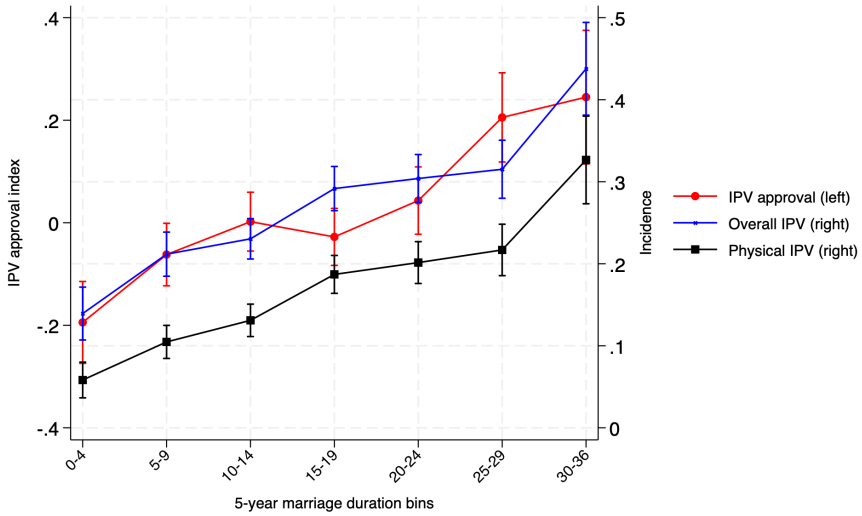
Verbal Abuse against Women. Similarly, experiences of verbal abuse were captured through the following acts of violence by husbands:

Has your husband ever sworn at you?; Has your husband ever belittled or humiliated you in

front of other people?; Has your husband ever scared or threatened you? (ex. With his looks, by shouting or breaking things, or by threatening to hurt those you love)

Our indicators of physical IPV and verbal abuse are binary variables that identify those women who had given a positive answer to any of these physical IPV and verbal abuse questions, respectively. Figure 4 shows the averages of overall IPV incidence, physical IPV incidence and IPV approval index for each 5-year bin for marriage duration.

Figure 4: IPV incidence and average IPV approval among married women by 5-year marriage duration bins



Notes: This plot compares average IPV incidence and IPV approval among married women who fall in different 5-year bins in terms of their marriage duration. 95% confidence intervals are displayed around each mean estimate.

Military Service in Conflict Zone. Our main conflict exposure indicator, *Conflict Zone*, is a binary variable identifying service in the state of emergency (OHAL) area (the shaded area in Figure 3). Moreover, to ensure that our results are not driven by a handful of outlier cases of exposure and to assess the potential role of the severity of armed combat exposure during service, we also construct measures of the intensity of armed combat the husband was exposed to in the conflict zone. Using geotemporal data on combatant casualties from the Turkish State-PKK Conflict Event Dataset TPCONED (Kibris, 2021), we create the dichotomous *Conflict Zone Moderate Combat* and *Conflict Zone Intense Combat measures*, indicating below and above median combatant casualties in the deployment province of the husband during his service.

Potential reporting bias in IPV-related questions. In our survey of married women, the response rate to IPV questions is nearly universal, with only 9 women out of the 6,384 interviewed not responding to at least one of these questions. Hence, it is unlikely that potential

non-response and the associated selection into sample constitute any threat to our identification strategy. However, our analysis relies on a survey that asks women about their IPV experiences and views. Since these are sensitive topics, we acknowledge the possibility misreporting, despite some auxiliary evidence that such misreporting is not widespread.[16] Any such misrepresentation would bias our estimates if it is related to husband's conflict zone exposure. The EXPOVIBE-IPV included feedback questions for the interviewers asking them to indicate whether they thought the respondent sounded sincere (honest) in her answers. Using this information, we verify that the main IPV-related measures we use in our analyses are not significantly related to perceived honesty of the respondent. Moreover, perceived honesty is not associated with husbands' conflict zone exposure (see Appendix Table A.11).

4 Empirical Analyses and Findings

We start our analyses in the EXPOVIBE-Conscript Veterans (EXPOVIBE-CV) survey (Kibris, 2020). In section 4.1 we first show our quasi-natural experiment in action by performing balance tests. These tests document that conflict zone assignment is independent of pre-deployment characteristics of conscripts. We then estimate the effect of armed conflict exposure on veterans' aggressive and authoritarian tendencies. We find strong evidence that conflict zone veterans display higher levels of aggression and authoritarianism compared to their non-conflict zone counterparts.

Next, in section 4.2 we turn to the EXPOVIBE-IPV survey (Kibris, 2019) to test the main predictions of our model of fear-induced submissiveness. Specifically, we will study the effect of husbands' armed conflict zone exposure –as a source of variation in husband type– on wives' attitudes towards IPV. Finally, in sections 4.3.1 and 4.3.2, we provide further evidence for the mechanism we propose.

4.1 Conflict zone deployment affects 'husband type'

We start our analysis by first demonstrating conditional exogeneity of conflict zone deployment in the EXPOVIBE-CV sample of veterans. To that end, in Table A.1 we perform balance tests by regressing our conflict zone deployment indicator separately on the following groups of exogenous pre-deployment covariates: (1) birth quarter dummies, (2) land ownership indicator, (3) indicator for a martyr (a security force casualty of the conflict) in the extended family, (4) Kurdish and Turkish ethnicity dummies, (5) conscription age, (6) military rank identifiers

[16] Agüero and Frisancho (2022) employ list methods on the entire DHS modules on IPV to assess misreporting. They do not find evidence of significant misreporting in general, although they report some misreporting by women with tertiary education.

and (7) total service duration for the draftee. The regressions are repeated on both the full sample of men (columns 1-3) as well as the sample of married men whose wives are 25-50 years old to match husbands of the women in the IPV sample (columns 4-9). For each of the two samples, we repeat the analysis using subsets of men with different education levels (high school or below vs. college graduates). In all the individual regressions presented in columns 1-6, we control for the conditional unconfoundedness covariates including height, and fixed effects for military occupation, branch of service, half-term service, draft year, education, and residence province. We control for the branch of service and military occupation as the rule openly states that deployments are based on the needs and availabilities of the Armed Forces across its branches and tasks (Official Gazette, 1927). And as discussed above, formal education is arguably the most critical input the Armed Forces uses in deciding the branch of service and military occupation of draftees, and therefore we control for educational attainment (Yıldırım and Erdinç, 2007; Yıldırımkaya, 2010). Province of registration fixed effects are specified because of the regulatory constraint that one has to serve outside his home province. We control for height because regulations include minimum and/or maximum height for certain military occupation classifications (Official Gazette, 2015). Finally, we also specify a half-term service indicator, again determined by education, as it may be instrumental in defining the branch and occupation classifications..

These balance tests allow us to assess if any of the aforementioned pre-deployment characteristics systematically differ among men who served in conflict and non-conflict zones. The tests reveal that deployment location is orthogonal to pre-deployment characteristics; therefore, they imply that our quasi-natural experiment can identify the causal impact of conflict zone service on men's post-service outcomes. Moreover, balance tests show that our quasi-natural experiment, i.e., the deployment lottery, satisfies the conditional unconfoundedness property in the (i) entire sample, (ii) among men with at most a high school degree and (iii) those who continued their education beyond high school. Therefore, given that our results apply to 97 percent of all men reaching conscription age between 1984 and 2011, we conclude that our natural experiment estimates the population average treatment effect (PATE) of conflict zone deployment during conscription. Because we do not have information about the branch of service and military occupation of veteran husbands in the EXPOVIBE-IPV sample (as wives are not expected to know such details about their husbands' service), in the last three columns we conduct the same balance tests only controlling for draft year, education, residence province, and half-term service,i.e., those unconfoundedness covariates for husbands that are available in EXPOVIBE-IPV survey. Results are similar.

Estimating the effect of conflict-zone exposure on husband type. Our ultimate goal in this paper is to estimate the causal effect of husband type (i.e. aggression tendency and subscription to authoritarian norms) on women's attitudes towards domestic violence. We hypothesize that this effect mainly operates through verbal and physical aggression towards intimate partners. But observed patterns of aggression are endogenous as they can be influenced by factors other than husband's inherent proclivity to violence. So our identification strategy rests on isolating the role of husband type that is independent of women's characteristics. To accomplish this, we first need to show that random assignment to conflict zone during military service affects violent and authoritarian tendencies of men after they return. In other words, we need to establish that conflict zone assignment is an important source of variation in *husband type* that is completely exogenous to wife and marriage characteristics. To do that we estimate the following econometric model using the EXPOVIBE-CV survey of draft veterans;

$$(Attitude/Trait)_d = \beta_0 + \beta_1 (Conflict\ zone)_d + \beta_2 \mathbf{E}_d + \beta_3 \mathbf{R}_d + \varepsilon_d \tag{1}$$

where d is an index for the individual draftee (respondent) that is our unit of analysis. Our dependent variable $(Attitude/Trait)_d$ can be a binary indicator or continuous measure of attitudes or traits that are either related to the tendency to use violence or authoritarianism. $(Conflict\ zone)_d$ is the independent variable of interest, indicating whether the draftee served in a conflict zone. $\mathbf{E}_d$ is a vector of exogenous pre-deployment characteristics, namely birth quarter, landownership status, having a martyr in the extended family, ethnicity, military rank and service duration. [17] $\mathbf{R}_d$ denote the vector of conditional unconfoundedness covariates (height, military branch, occupation, and half-term service indicators, as well as fixed effects for draft year, educational attainment, and residence province) that are included so that the residual variation in deployment location is orthogonal to any observed and unobserved factor that might influence attitudes and personal traits of the respondents. Finally, ε_d denotes the random error term. Since the province to which the draftee was deployed determines the treatment status, we cluster standard errors at the level province of military service. Our regression sample is restricted to men who are married and whose wives are 25 to 50 years old to ensure that our results are representative for husbands of the women in the EXPOVIBE-IPV survey.

Moving to results, in Table 1 panel A, we first present a series of logistic regressions that assess the impact of serving in the conflict zone on various outcomes. In the first four columns, the dependent variables are respondents' self-assessments about their tendency to resort to violence

[17] Military rules openly state conscript rank to be unrelated to deployment assignment. Moreover, as service duration is determined by the regulations in place at the time of induction, it should also be unrelated to deployment assignment.

and their ability to control their anger. All of these variables are binary indicators. The results in columns 1 and 2 suggest that, other things equal, among men who served in the conflict zone, the odds of *using violence when necessary*[18] and *using violence when provoked*[19] are higher by a factor of 1.34 and 1.47 than among men who served elsewhere. The estimates are statistically significant at 5% and 1% levels respectively. The next two columns show that military service in conflict zone raises the odds that the respondent will not consider himself *as a calm person* and will *have trouble controlling his anger* by a factor of 1.38 and 1.64, respectively.[20]. These estimates are statistically significant at 10% and 1% levels, respectively. In the last two columns, we focus on authoritarian norms.[21]. Conscripts, who were sent to conflict zone, are more likely to consider discipline and respect for authority as important personal traits (significant at 10%). They are also more likely (than non-conflict zone men) to consider obedience, discipline and ethical behavior as key to a good life, but this difference is imprecisely estimated.

In panel B of Table 1, for greater transparency and an easier interpretation of the estimated magnitudes, we repeat the first four regressions in panel A using an OLS estimator instead. Results are qualitatively unchanged. Depending on the question, the probability that a respondent will resort to violence is about 4.5 to 4.6 percentage points higher among men with conflict zone exposure than other men. This is not a small difference, considering that the overall probability ranges between 14 and 25 percent in the sample. Depending on the question, respondents with conflict zone experience are 1.9 to 2.7 percentage points more likely to report anger management problems, when the respective sample means are 5.5 and 8.4 percent.

In column 5 of panel B we compute the first principal component (FPC) of the two outcome measures related to authoritarian norms (used in columns 5-6 of panel A) to construct a standardized continuous obedience-discipline index. Using this measure, the effect of serving in conflict zone is around 7.7 percent of a standard deviation. Finally, in column 6 of panel B we use as dependent variable a continuous anger-violence index which is the standardized FPC of the first four outcome measures (used in columns 1-4). Using this measure, the effect of serving in conflict zone is around 9.4 percent of a standard deviation.

Lastly, in panel C of Table 1, we show that the effects reported in panel B are largely driven

[18]This binary variable is coded one if the respondent completely agreed with the statement *'If I have to resort to violence to protect my rights, I will'*.

[19]This binary variable is coded one if the respondent completely agreed with the statement *'Given enough provocation, I may hit another person'*.

[20]The binary variable used in column 3 is coded one if the respondent said *I am not liked this at all* in response to the statement *'I am an even-tempered person'*. The binary variable used in column 4 is equal to one if the respondent said *'I am completely like this'* in response to the statement *'I have trouble controlling my temper'*

[21]The outcome variable in column 5 is a dummy that equals one for respondents who answered *I agree completely* to the statement *'Obedience and respect to authority is the most important value that children need to learn.'*. The outcome variable in column 6 is an indicator that equals one for respondents who *completely agreed* with the statement *'The key to living well is obedience, discipline and compliance with ethical behaviour.'*

Table 1: The Impact of Conflict Zone Service on Aggression and Authoritarian Attitudes, EXPOVIBE-CV Married Sample

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A : Logistic regressions						
Dependent variable	Ready to use violence if necessary	Ready to use violence if provoked	Not a calm person	Have trouble controlling anger	Kids should learn discipline and respect authority	Obedience, discipline and morals are key
Conflict Zone	0.293**	0.388***	0.327*	0.493***	0.138*	0.106
	(0.121)	(0.145)	(0.169)	(0.180)	(0.079)	(0.104)
Observations	3,544	3,494	3,399	3,288	3,517	3,544
Sample mean of outcome	0.247	0.146	0.089	0.059	0.306	0.290
SD of outcome	0.431	0.353	0.284	0.236	0.461	0.454

	(1)	(2)	(3)	(4)	(5)	(6)
Panel B : OLS						
Dependent Variable	Ready to use violence if necessary	Ready to use violence if provoked	Not a calm person	Have trouble controlling anger	Obedience-Discipline Index-ICW	Anger-Violence Index-ICW
Conflict Zone	0.046**	0.045***	0.027*	0.019**	0.076**	0.099**
	(0.020)	(0.017)	(0.014)	(0.009)	(0.035)	(0.040)
Observations	3,579	3,580	3,565	3,570	3,576	3,586
R-squared	0.212	0.139	0.105	0.129	0.228	0.119
P-value (randomization-t)	0.057	0.023	0.100	0.073		
Joint test p-value (randomization-c)	0.060	0.060	0.060	0.060		
Westfall-Young multiple testing p-value (randomization-t)	0.088	0.088	0.088	0.088		

	(1)	(2)	(3)	(4)	(5)	(6)
Panel C: OLS, intensive margin						
Conflict Zone Moderate Combat	0.053*	0.007	0.000	-0.003	-0.001	0.030
	(0.028)	(0.016)	(0.014)	(0.011)	(0.042)	(0.065)
Conflict Zone Intense Combat	0.041*	0.076***	0.048***	0.037***	0.138***	0.156**
	(0.023)	(0.020)	(0.016)	(0.012)	(0.035)	(0.062)
Observations	3,579	3,580	3,565	3,570	3,576	3,586
R-squared	0.212	0.141	0.107	0.130	0.229	0.120
Sample mean of outcome	0.244	0.142	0.084	0.055	0.038	0.020
SD of outcome	0.430	0.350	0.278	0.228	0.993	1.006

Notes: These estimates are obtained from the sample of married men in the EXPOVIBE-CV, using sampling weights. Standard errors, clustered on the province of military service, in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. All models control for conditional unconfoundedness covariates (height, military branch, occupation, and half-term service indicators, and fixed effects for draft year, educational attainment, and residence province), and pre-deployment characteristics (service length, draft age, military rank, birth quarter, landownership status, having a martyr in the family, and ethnicity).

by those respondents who served in conflict zones with more intense combat as captured by war casualties within their base province during their service.

To sum up, our findings imply that husbands of women in the EXPOVIBE-IPV survey who were deployed to conflict zones during their military service should be significantly more likely to have temperament issues, anger management problems and to display authoritarian attitudes in their post-service lives. Whether the impact of conflict zone assignment is due to the psychological toll of direct combat exposure, military socialization or a combination of different factors, these factors are all orthogonal to post-marriage events. Therefore service location can

be treated as an exogenous shock to husband type, enabling us to study its influence on husband behavior during the marriage and its potential ramifications for wife's views and attitudes. The next section turns to the identification of these ramifications.

4.2 Husband's Conflict Zone Service and Wife's Approval of IPV

In the EXPOVIBE-IPV survey a series of questions aim to measure how justified women think it is for husbands to use physical violence against their wives under various hypothetical scenarios. The main question is formulated as *Sometimes partners feel uncomfortable with each other's behaviour and respond to this in different ways. Would you find it appropriate for a husband to hit or slap his wife if she acted in the following ways?* and goes on to list 15 different scenarios. In Table 2 we analyze how conflict zone experience by husbands may affect each of these answers. Possible answers range on a Likert scale from 1 (*I don't find it appropriate at all*) to 5 (*I find it completely appropriate*). We convert these answers into a binary indicator of approving physical IPV under a given scenario if the respondent's answer corresponds to 4 or 5 on the Likert scale (i.e. somewhat or completely appropriate). The econometric model we estimate is

$$\textit{Physical IPV approval}_w = \gamma_0 + \gamma_1 \textit{(Conflict zone)}_w + \gamma_2 \mathbf{E\_IPV}_w + \gamma_3 \mathbf{R\_IPV}_w + \varepsilon_w \qquad (2)$$

where w is an index for a woman surveyed. Our dependent variable $\textit{Physical IPV approval}_w$ can be a binary indicator or a continuous measure of IPV approval by the respondent. $\textit{(Conflict zone)}_w$ is the independent variable of interest, indicating whether the husband was deployed to the conflict zone. $\mathbf{E\_IPV}_w$ is a vector of the husband's pre-deployment characteristics available in the EXPOVIBE-IPV survey, namely service length, draft age, birth quarter, landownership status, having a martyr in the extended family, and ethnicity. $\mathbf{R\_IPV}_w$ denote the vector of conditional random assignment variables available in the IPV survey, including years of schooling and year of induction fixed effects, half-term indicator, and residence province fixed effects. Finally, ε_d denotes the random error term. Since the province to which the draftee was deployed determines the treatment status, we cluster standard errors at the province of military service. Our regression sample is restricted to women whose husbands were drafted within the 1984-2011 to ensure that our results are representative for wives of the men in the EXPOVIBE-CV survey.

The results suggest that answers to some, but not all, questions differ signficantly between wives of conflict zone husbands and wives of men who served elsewhere. Women married to conflict zone veterans are more likely (than other women) to approve of physical violence against wives who act improperly (i.e. behaves in a way that her husband does not approve of), talk to other men, refuse to do the housework or cook, do not look after her children well, meet their

family without permission from husband, wear clothes that their husbands do not approve of and cheat on their husbands. The estimated effects range from 2 to 7 percentage points higher probability of IPV approval. While the coefficient estimates are also positive for the other 8 scenarios, they are imprecisely estimated by conventional standards.

Given the high number of outcome variables that speak to IPV tolerance, it is not practical to repeat subsequent analyses individually for each of these measures. One also runs into the multiple hypothesis testing problem which raises the rate of false rejections of the null unless we correct for it. Ideally, we would want a single measure for how acceptable domestic physical violence against women is. As a solution, we employ a composite index that is constructed as an inverse covariance weighted average of the 15 underlying answers (measured on the 5-point Likert scale and standardized) (Anderson, 2008). We call this measure the IPV approval index (ICW).[22] The last column (Column 16) presents the effect of conflict zone assignment on this aggregate index. In line with Proposition 2 of our model, women married to conflict zone veterans have a significantly higher tolerance (by about 10 percent of a standard deviation) for physical IPV compared to women whose husbands served in peaceful areas. For the analyses that follow, we use the *IPV approval index* as our main outcome variable.

Addressing assortative marriage. Could it be that our reduced form estimates are confounded by selective marriage? After all, it is plausible that women who already hold more tolerant views about IPV (e.g. due to parental socialization or other influences on pre-marriage gender norms of women) are more likely to marry men with higher potential to engage in IPV.

To address this possibility we first probe whether conflict zone deployment of the husband is a systematic predictor of various wife and marriage characteristics available in the EXPOVIBE-IPV survey. The results in panel A of Appendix Table A.5 suggests that women married to conflict zone veterans marry at a significantly younger age and are more likely to get into non-consensual marriages than otherwise similar women. However, we do not observe any significant difference with respect to wife's years of schooling, age difference with husband, history of parental IPV, and history of parental IPV in the husband's original family (in-laws IPV). In panel B of the same table, we limit the sample only to those women who were married within the last 5 years, thereby offering a more informative test of selective marriage that is much less confounded (if any) by the potential influence of selective divorce. The results are qualitatively similar.

Next, in Table 3 we probe robustness of the reduced form effects we document in Table 2 to the aforementioned characteristics. The first column reproduces our baseline analysis using a smaller sample that ensures that none of the robustness controls are missing. We start in column 2 by adding three important wife characteristics (years of schooling, age, and work status). In

[22]Results are very similar when we use the first PC of the same 15 questions instead.

Table 2: Husbands' Conflict Zone Service and Wives Approval of Physical IPV

OLS								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent variable: physical IPV acceptable when wife:	talks back	does not do what's told	does not shut up	criticizes husband	acts improperly	disrespectful to husband's family	talks to other men	does not do housework
Conflict Zone	0.007	0.003	0.008	0.003	0.022*	0.006	0.059**	0.028**
	(0.009)	(0.008)	(0.008)	(0.008)	(0.012)	(0.008)	(0.025)	(0.013)
Observations	5,468	5,468	5,468	5,466	5,465	5,467	5,464	5,465
R-squared	0.161	0.149	0.144	0.150	0.144	0.162	0.133	0.147
Sample mean of outcome	0.047	0.057	0.054	0.052	0.064	0.048	0.092	0.059
SD of outcome	0.212	0.232	0.225	0.222	0.245	0.215	0.289	0.235
OLS								
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Dependent variable: physical IPV acceptable when wife:	goes out without permission	does not take care of children	lies	meets her family without permission	dresses improperly	spends money without permission	cheats husband	IPV approval index (ICW)
Conflict Zone	0.011	0.031*	0.038	0.016*	0.041**	0.010	0.069***	0.106***
	(0.009)	(0.017)	(0.023)	(0.009)	(0.016)	(0.009)	(0.020)	(0.036)
Observations	5,465	5,464	5,463	5,465	5,465	5,464	5,453	5,469
R-squared	0.165	0.154	0.127	0.177	0.137	0.180	0.181	0.242
Sample mean of outcome	0.061	0.090	0.096	0.042	0.078	0.056	0.288	0.014
SD of outcome	0.239	0.286	0.295	0.200	0.269	0.230	0.453	1.001

Notes: These estimates are obtained using sampling weights from the sample of married women (ages 25 - 50) interviewed by the EXPOVIBE-IPV survey, whose husbands served in the military between 1984 and 2011. Standard errors, clustered on the province of military service, are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. All models control for (i) conditional unconfoundedness covariates, which include fixed effects for the draft year, husband's education, residence province, and an indicator variable for half-term service, as well as (ii) pre-deployment characteristics (namely, service duration, fixed effects for draft age, and land ownership.

the next column, we control for three marriage characteristics, whether the woman was younger than 20 when she first got married, duration of marriage, and whether the woman gave any consent. Recent evidence suggests inter-generational persistence in IPV and parental influence on IPV approval (Collins, 2024). In column 4 we add parental IPV and in-laws IPV dummies, to account for the likely influence of domestic violence among parents on certain traits and norms their children may hold (including but not limited to normalization of IPV). In column 5 we include all robustness controls simultaneously. Our estimate for the impact of conflict zone deployment remains highly significant and similar in magnitude. It appears that less educated women and women whose mothers were subject to IPV exhibit stronger approval of IPV.

To sum up, our selectivity regressions in Table A.5 indicated to some evidence that wives of men with conflict zone deployment are more likely to get married at a relatively younger age and more likely to do so via arranged marriages, however, there is no evidence of a significant difference between conflict zone and non-conflict zone couples in terms of parental IPV history,

Table 3: Husbands' Conflict Zone Service and IPV Approval by Wives - Robustness checks

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dependent variable:	IPV approval index (ICW)								
Conflict Zone	0.137***	0.128***	0.129***	0.137***	0.125***	0.238**	0.217**	0.133***	0.129***
	(0.035)	(0.035)	(0.034)	(0.036)	(0.035)	(0.102)	(0.108)	(0.045)	(0.044)
Wife Years of Schooling		-0.048***			-0.046***		-0.029		-0.038***
		(0.007)			(0.007)		(0.022)		(0.006)
Wife Age		0.001			-0.006		0.007		-0.000
		(0.008)			(0.006)		(0.048)		(0.005)
Wife Works for Money		-0.010			-0.008		-0.097		-0.008
		(0.038)			(0.037)		(0.162)		(0.038)
Teen bride (marriage age < 20)			-0.022		-0.061		-0.063		-0.071
			(0.062)		(0.060)		(0.229)		(0.057)
Marriage Duration			0.012*		0.010		-0.052		0.014*
			(0.007)		(0.007)		(0.051)		(0.007)
Consent Marriage			-0.106		-0.044		-0.174		0.044
			(0.082)		(0.080)		(0.155)		(0.084)
Parental IPV				0.088*	0.087*		0.137		0.040
				(0.051)	(0.048)		(0.121)		(0.053)
In-laws IPV				0.055	0.055		0.103		-0.006
				(0.046)	(0.045)		(0.148)		(0.047)
Sample:	All women	All women	All women	All women	All women	Married before milit. Serv.	Married before milit. Serv.	No physical IPV history	No physical IPV history
Observations	4,778	4,778	4,778	4,778	4,778	429	429	3,986	3,986
R-squared	0.212	0.227	0.216	0.214	0.231	0.265	0.285	0.211	0.226
Sample mean of outcome	0.015	0.015	0.015	0.015	0.015	0.052	0.052	-0.033	-0.033
SD of outcome	1.002	1.002	1.002	1.002	1.002	1.050	1.050	0.956	0.956

Notes: These estimates are obtained using sampling weights from the sample of married women (ages 25 - 50) interviewed by the EXPOVIBE-IPV survey, whose husbands served in the military between 1984 and 2011. Standard errors, clustered on the province of military service, are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. All models control for (i) conditional unconfoundedness covariates, which include fixed effects for the draft year, husband's education, residence province, and an indicator variable for half-term service, as well as (ii) pre-deployment characteristics (namely, service duration, fixed effects for draft age, and land ownership.

nor do we observe a difference in terms of wives' education. Our results are robust to controlling for the pre-marriage characteristics of women. Yet, these results do not preclude the possibility that women with some unobserved correlates of IPV-approving views are more likely to select into marriages with men who served in conflict zone. To limit the confounding effect of such selective marriage, in columns 6 and 7, we limit the sample to those women who got married before their husbands were conscripted. In this much smaller sample of women, the estimated magnitudes are much larger and statistically significant. Although we cannot argue for much external validity on such a peculiar subsample, these results go against any story in which selective marriage is the primary driver behind our main findings.

IPV History. In principle our results might be completely driven by women who had endured physical IPV. For example, this would be the case if the only way conflict zone husbands could affect wives' views on domestic violence was through the coping mechanism that kicks in after systematic physical abuse (Frezza, 2024). However, in columns 8 and 9 we show that this is not the case. When we limit the sample to women who never had any physical IPV experience, we

obtain estimates that are very similar –both in terms of magnitude and statistical significance– to those in the overall sample (see columns 1 and 5 for comparison).[23] That we observe this pattern also among women without a history of physical IPV implies that we need a theory that is sufficiently general to apply to all married women, whether they faced systematic physical violence or not.

Intensive Margin of Conflict Zone Exposure. The results in the bottom panel of Table 1 indicate that the adverse effects of conflict zone exposure on husband type are primarily driven by conscripts who were deployed to locations in the conflict zone with higher combat intensity, as proxied by above-median combat-related casualties during their service period. If husband type is the main driver of the reduced form effects of conflict zone service presented in Table 3, one expects military service in intense combat locations to also be a strong predictor of IPV attitudes of wives. Thus, in Appendix Table A.4, we replicate the analysis from Table 3 using the same indicators of combat intensity. Reassuringly, the results show a similar pattern, although the distinction between moderate and high-intensity combat experiences is less pronounced. The adverse effects of husbands serving in high-intensity combat areas on their wives' IPV (intimate partner violence) attitudes are significant and robust. While smaller in magnitude, deployment to moderate-intensity combat zones also predicts significantly higher IPV approval among wives in most specifications.[24]

4.3 Fear-Induced Submission

We propose that women's perceptions of intimate partner violence evolve throughout a relationship as they become more aware of the potential for physical harm posed by their partners. As a husband's behavior is progressively unveiled during the marriage, a wife's actions and attitudes adapt accordingly. Specifically, we contend that women perceive aggressive and authoritarian attitudes and behaviors of their husbands as indicators of impending systematic physical violence. Consequently, they may preemptively adopt a more submissive and passive stance in their relationships, especially when they have limited options to escape the abuse. Their normative views shift in tandem with their submissive attitudes, leading them to accept their husband's controlling behavior and internalize unequal gender norms –in our case, tolerance towards gender-based violence or more specifically the husband's "right to punish" his wife using physical violence.

The theoretical model we presented in section 2 was designed not only to illustrate this basic

[23] We verify in Appendix Table A.11 panel B that our results are robust to excluding from our sample those respondents who were deemed as "not fully sincere" by the interviewers (see columns 3-6).

[24] In all specifications, we fail to reject the null hypothesis of equal effects between moderate and intense combat exposure.

argument but also generate some specific predictions that we can test on our sample of married women. Before we discuss and test these predictions in subsection 4.3.1, we first provide evidence that is consistent with the main premises or assumptions underlying our argument. Then we present evidence on the main predictions that come out of our model.

4.3.1 Evidence on the main assumptions of fear-induced submission

From husband type to husband behavior. The first premise is that conflict-zone husbands are not only more authoritarian and less able to manage their anger, but they are also more likely to engage in different forms of IPV, in particular, physical violence and verbal abuse[25]. Table 4 presents evidence consistent with this premise. In panel A, we use only the baseline controls. The models in Panel B additionally include the robustness controls we used in Table 3. In the first column, we replicate Cesur and Kibris (2023) to show that conflict zone husbands are indeed more likely to use physical violence against their wives. In column 2, we combine three individual questions about whether the husband of the respondent has (i) scared or threatened her, (ii) belittled or humiliated her in front of others or (iii) cursed at his wife into a single indicator that we call *verbal abuse*. The indicator is coded one if at least one of the three answers is affirmative. We find that husbands who came back from military service in conflict zone are almost 7 percentage points more likely to engage in some form of verbal abuse against their wives. The effect is statistically significant at the 1% level. These findings are consistent with the fact that conflict zone men are more authoritarian and more likely to have anger control problems and resort to violence.[26]

Fear of physical IPV as a driver of submissiveness. The second premise of our model is that wives to aggressive husbands are more likely to show signs of fear-based submissiveness, and this fear is ultimately driven by higher risk of physical violence.[27] Therefore, next we analyze whether conflict-zone husbands are more likely to evoke fear and induce submission in their partners. Since in EXPOVIBE-IPV we do not have a direct question about fear-induced submission to husband, we use the answers to the following question as a proxy: *'Do you think a woman can refuse to have sex with her husband in the following situations?'*. Then the question lists various hypothetical situations: (1) *'When she doesn't want to'*, (2) *'When her husband is drunk'* (3) *'When she has health issues'*, (4) *'When her husband treats her badly'*. Women could choose one of the following responses under each of these scenarios: (a) *Yes*, (b) *No, it is not*

[25] In the language of our model, an aggressive man is more likely to engage in abuse than a non-aggressive man: $f_A \geq f_N$ for each $f \in \{\underline{p}, \bar{p}, \underline{q}, \bar{q}\}$

[26] In controlled regressions, not shown here, we show that IPV approval is positively related to both physical IPV and verbal abuse, and that fear-induced submission and IPV approval also seem to go hand in hand.

[27] In our model, submission occurs to minimize expected cost of physical IPV.

Table 4: Fear and Submission as a Potential Mechanism, EXPOVIBE-IPV sample

Panel A: Baseline controls	(1) Phy. IPV	(2) Verbal abuse	(3) Scared to refuse sex	(4) Scared to refuse sex	(5) Scared to to refuse sex
Conflict Zone	0.066***	0.068***	0.035**	0.031*	0.029*
	(0.018)	(0.018)	(0.017)	(0.017)	(0.016)
Verbal abuse				0.045***	0.011
				(0.015)	(0.012)
Physical IPV					0.067***
					(0.018)
Observations	4,775	4,777	4,747	4,744	4,739
R-squared	0.152	0.113	0.074	0.080	0.088
Panel B: with robustness controls	(1) Phy. IPV	(2) Verbal abuse	(3) Scared to refuse sex	(4) Scared to refuse sex	(5) Scared to refuse sex
Conflict Zone	0.054***	0.057***	0.031*	0.029*	0.027*
	(0.017)	(0.017)	(0.016)	(0.016)	(0.016)
Verbal abuse				0.035**	0.009
				(0.016)	(0.013)
Physical IPV					0.058***
					(0.018)
Observations	4,775	4,777	4,747	4,744	4,739
R-squared	0.237	0.205	0.090	0.094	0.100
Sample mean of outcome	0.165	0.217	0.051	0.051	0.051
SD of outcome	0.371	0.412	0.221	0.220	0.220

Notes: These estimates are obtained using sampling weights from the sample of married women (ages 25 - 50) interviewed by the EXPOVIBE-IPV survey, whose husbands served in the military between 1984 and 2011. Standard errors, clustered on the province of military service, are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. All models control for (i) conditional unconfoundedness covariates, which include fixed effects for the draft year, husband's education, residence province, and an indicator variable for half-term service, (ii) pre-deployment characteristics (namely, service duration, fixed effects for draft age, land ownership. In panel B, we additionally include in the models the robustness controls used in Table 3, namely wife's years of schooling, age, her work status, dummy for teen bride (married at 19 or younger), duration of marriage, dummies for consent marriage, history of parental and in-laws IPV.

right for her to say no and (c) *No, she would be scared to say no.* Combining these answers, we create a binary variable called *scared to refuse sex* that is coded one if the respondent indicated that the woman *would be scared to say no* under at least one of the four situations, and zero otherwise.[28] In column 3 of Table 4, we show that women married to conflict-zone husbands are about 3.5 percentage points more likely to exhibit fear-induced submission (as proxied by fear-based inability to refuse sex). Consistent with our narrative, columns 4 and 5 indicate that physical and verbal abuse are highly predictive of fear-induced submission among women. Yet, conditional on physical IPV experience and conflict zone exposure of the husband, verbal

[28]Note that we code the variable zero if respondent did not mention fear as a justification in any of the scenarios even if she thinks that it is not okay to refuse the husband for other reasons (like in answer (b)).

intimidations by the husband do not seem to explain much. This is consistent with our premise that the main driver of fear and submission is the risk of physical violence, and verbal abuse induces fear possibly to the extent it is a precursor of or accompanied by physical IPV.

From submission to IPV approval. The third premise of our argument is that as women become more fearful and submissive they also become more approving of physical IPV under various scenarios of "non-submissive" behavior by hypothetical wives. In Appendix Table A.7, we show evidence of the relationship between fear of husband and IPV approval. We use the 2014 Turkish National Survey on Domestic Violence against Women (NSDVW) (Yüksel Kaptanoğlu et al., 2015) which includes a more direct measure of fear from husband than what we have in EXPOVIBE-IPV survey. The results show that those women who report that they are afraid of their husbands tend to have stronger approval of IPV.[29]

Why would fear of husband and submission to his demands affect women's views about domestic violence over the course of marriage? There are various psychological mechanisms that predict shifts in attitudes among women who faced abusive treatment by their partners and developed a fear of physical violence. One such mechanism can be the desire to minimize cognitive dissonance. For women, who have been pushed into submissive behavior by their husbands and come to conform to various restrictions imposed upon them in daily life, it may be self-contradictory to argue that norm transgressions are acceptable and therefore should not be punished. The second mechanism might be learned helplessness as a result of emotional or physical abuse (Walker, 1979). Such abuse can be strategically used by the husband to gain control over the relationship through means such as producing fear, making threats, psychological manipulation or physical harm. Women who face emotional abuse may become psychologically paralyzed and, therefore, submissive especially if they are unable to stop the abuse. Ultimately a feeling of helplessness may prevail, even when the wife starts to face more serious threats such as physical IPV. She may come to accept her current reality as an inescapable fate despite that she might have a chance to get out of her abusive relationship, had she chosen to seek help. A feeling of worthlessness that ensues with emotional abuse can make divorce even more difficult. The third and closely related mechanism is based on shattered assumptions of victims as a result of traumatic experiences (Janoff-Bulman, 1992). Facing psychological or physical violence from their husbands may disrupt women's sense of safety and self-worth and push them to question their beliefs about themselves, others, and the world.

[29] The relationship holds even conditional on the IPV history of the respondent, and it is robust to controlling for various demographic and marriage-specific factors as well as province fixed effects. Clearly, given the endogeneity concerns, these findings can only be suggestive.

4.3.2 Testing additional predictions of our theory

Our theory of fear-induced submission makes various other predictions which can help differentiate our proposed mechanism from some alternative explanations. Below, we discuss and present evidence on these predictions.

Heterogeneity by women's exit potential. Because entrapment in an abusive relation is more likely for women with limited outside options, we expect the availability of exit options to mediate submissive attitudes and IPV approval. Applying resource theory to women's acceptance of domestic violence, we argue that women's financial independence and autonomy may provide a certain degree of protection against such violence [30] Moreover, a woman who knows she will get a divorce if her husband engages in physical violence will have little reason to act submissively. Our model confirms this intuition. Corollary 2 to Proposition 2 states that women married to conflict-zone husbands are more likely to submit than those married to non-conflict zone husbands only if their outside options (i.e. exit capacity) are low. Exit capacity may depend on the power balance between the husband and the wife, personal resources available to women and other non-tangible costs to divorce. Lack of a stable personal income source such as full-time paid employment or low education that limits gainful employment opportunities and other factors contributing to the power imbalance between the couples may predispose women to act more submissively when they perceive high risk of physical IPV. Factors that raise the cost of divorce like having children, may also have similar effects on women's calculus about divorce, as also shown by Deschamps (2024).[31]

Before we empirically assess the heterogeneity of the conflict zone effects on IPV approval with respect to the above-mentioned proxies for exit capacity, it is incumbent upon us to first show that the aforementioned characteristics do really matter for women's exit options. In particular, we need to probe if and how the sensitivity of divorce and separation decisions to IPV exposure depend on these socio-demographic factors. Since EXPOVIBE-IPV sample only contains married women, we once again use data from the 2014 National Survey on Domestic Violence against Women (NSDVW) in Turkey, which has information on both married and single women. We focus on respondents who married at least once. We also limit the age range to 25-50 to be consistent with the EXPOVIBE-IPV sample. In Table 5 we present results from a linear probability model where the outcome is whether the respondent is currently divorced or lives separately from her partner. The main variable of interest is IPV experience, which is coded

[30] It is worth noting that financial autonomy can also have a partly offsetting effect if husbands use violence strategically to sabotage their wives' exit options.

[31] Using Mexican survey data, the author shows evidence that the positive relationship between motherhood and the probability of current violence is not because having a baby triggers men's violent behavior, but because motherhood makes women more likely to stay with a violent partner.

one if the respondent has any history of exposure to physical, sexual or psychological violence by an intimate partner, and zero otherwise.

Findings offer two main takeaways. As expected, IPV history is a strong predictor of being divorced or separated. Women who have had IPV exposure in the past are on average about 13 percent more likely to be currently divorced or separated. Second, and more importantly, this relationship is less pronounced for women (i) whose last marriage was arranged, (ii) who married before the age 19, (iii) does not have personal income source, (iv) have lower education than university degree and (v) have at least one child. In other words, women who belong to these demographic groups are less likely to quit abusive relationships than other women.

Guided by this auxiliary evidence on the nature of selective divorce, we proceed to our heterogeneity analysis. Figure 5 displays point estimates (with 95 percent confidence intervals) for the effects of husband's armed conflict exposure on IPV approval by wives. Each coefficient estimate is obtained using a linear probability model on a different subsample of the married women in the EXPOVIBE-IPV survey. Looking at the estimates in the top six figures, we see that the conflict zone deployment effects are all significant and positive (indicating stronger IPV approval) among those women who married without their own consent, who married before the age 20, who did not go to college, who has no full-time employment or has no personal income and who has children. Consistent with the predictions of our model, these effects seem to vanish for women from less vulnerable demographic groups.

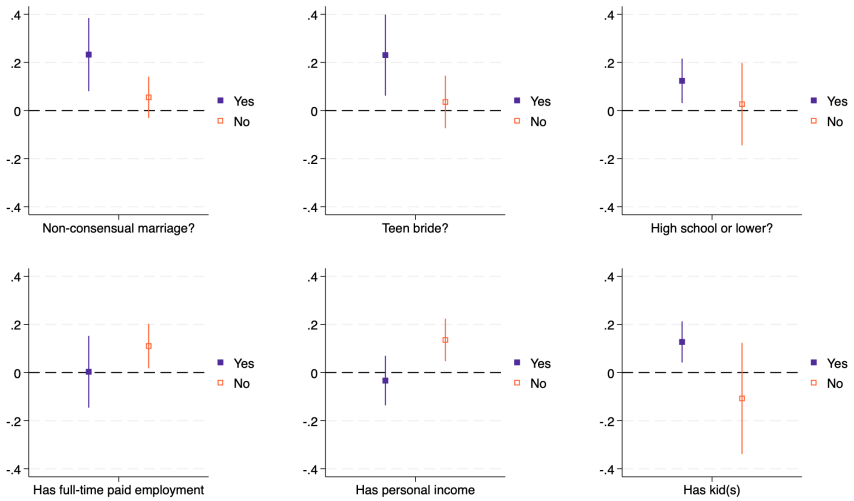
One potential worry with our heterogeneity analysis is that husband type may influence the characteristics by which we split our sample. More generally, husband type can affect not only the perceived risk of physical IPV but also those factors that shape women's capacity to exit (e.g., Adams et al., 2024). If that's the case, the sample divisions in Figure 5 would be endogenous, making it harder to interpret our results. We have previously shown that marriage at younger age and non-consensual marriage is more common among wives of conflict zone men, but there is no systematic difference in terms of wives' education level (see Appendix Table A.5). In columns (1) to (4) of Appendix Table A.6 we check whether husband type (as shaped by conflict zone exposure) has any predictive power for the other factors we use as proxies for women's' exit capacity. Since attrition from sample due to selective divorce may affect our results, we estimate the same relationship first among women who married at most five years ago and then among all women regardless of marriage duration. We find that within the first five years of marriage, couples' decision to have kids, woman's employment status or whether the woman has any personal income are not significantly related to husband type. In the whole sample of married women, we see that conflict zone couples are 2 percentage points more likely to have kids. The point estimate for having a child is almost identical in size to that in the newly-wed sample, but more precisely estimated. Yet, given that more than 90 percent of the sample has

Table 5: IPV experience and selection into separation and divorce, NSDVW-2014 Sample

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Ever divorced/separated					
IPV experience	0.128***	0.175***	0.168***	0.102***	0.110***	0.210***
	(0.011)	(0.021)	(0.016)	(0.012)	(0.009)	(0.023)
Last marriage was arranged	-0.060***	-0.006	-0.062***	-0.061***	-0.061***	-0.063***
	(0.015)	(0.008)	(0.015)	(0.015)	(0.015)	(0.015)
High school	-0.006	-0.005	-0.008	-0.005	-0.017	-0.004
	(0.009)	(0.010)	(0.009)	(0.010)	(0.015)	(0.009)
College or above	-0.023	-0.018	-0.019	-0.016	-0.064***	-0.018
	(0.025)	(0.025)	(0.025)	(0.024)	(0.020)	(0.025)
Has own income	0.061***	0.062***	0.061***	0.010	0.062***	0.061***
	(0.022)	(0.022)	(0.021)	(0.014)	(0.022)	(0.021)
Number of kids in HH	-0.010*	-0.011**	-0.010*	-0.009*	-0.010*	
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	
Has kid(s)						0.012
						(0.014)
Urban	0.005	0.004	0.007	0.005	0.006	0.006
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
Kurdish	0.067*	0.060	0.073*	0.062	0.065	0.064*
	(0.039)	(0.044)	(0.039)	(0.042)	(0.041)	(0.035)
Arabic	0.064***	0.032**	0.057*	0.049**	0.060***	0.064**
	(0.019)	(0.014)	(0.029)	(0.019)	(0.021)	(0.026)
Age	0.002**	0.002**	0.002**	0.002**	0.002**	0.002*
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Teen bride	-0.054***	-0.055***	0.002	-0.053***	-0.053***	-0.055***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
IPV experience x Last marriage was arranged		-0.099***				
		(0.026)				
IPV experience x Teen bride			-0.100***			
			(0.019)			
IPV experience x Has own income				0.095***		
				(0.026)		
IPV experience x High school					0.020	
					(0.033)	
IPV experience x College or above					0.099***	
					(0.035)	
IPV experience x Has kid(s)						-0.095***
						(0.022)
Observations	4,071	4,071	4,071	4,071	4,071	4,071
R-squared	0.101	0.109	0.108	0.107	0.105	0.105
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Sample mean of outcome	0.086	0.086	0.086	0.086	0.086	0.086
SD of outcome	0.280	0.280	0.280	0.280	0.280	0.280

Notes: The estimates are based on a sample that comes from Turkey's National Survey on Domestic Violence against Women (NSDVW) conducted in 2014. Unlike EXPOVIBE-IPV, it also contains respondents who were not married at the time of interviews. The regression sample includes those respondents aged 25-50 (to match our EXPOVIBE-IPV sample), who were ever married, including women who are currently divorced or separated in addition to those who are currently married. In all regressions we use sampling weights provided by the survey. Besides the main variable of interest (IPV history), all regressions include dummies for arranged marriage, education categories, whether respondent has own income, number of children (or kid dummy), urban/rural status of place of residence, ethnic background, age, dummy for teen bride (married before 20), and province FE. Standard errors, clustered on the province of residence, are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

(a) Splits of full sample, EXPOVIBE-IPV survey



(b) Splits of the sample of women without physical IPV history

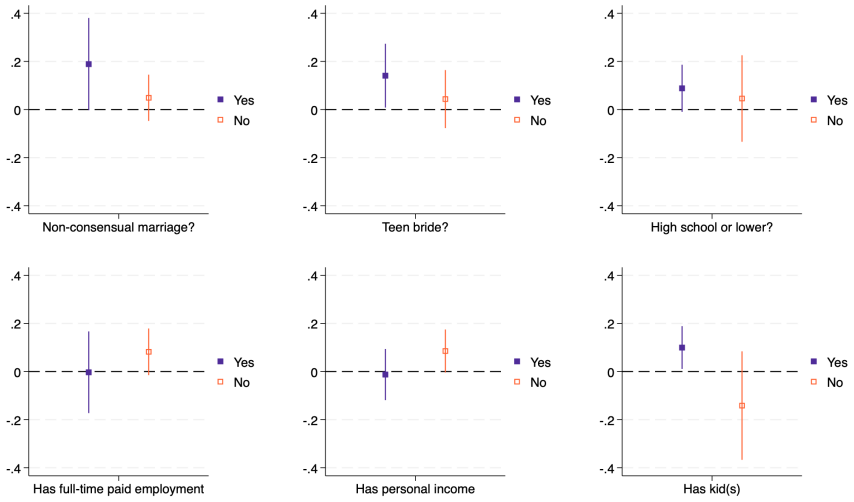


Figure 5: Heterogenous effects of husband's conflict zone exposure: the role of wife's exit capacity

Notes: Each plot displays the effects of conflict zone service by the husband on wife's IPV approval using two complementary subsamples of married women from EXPOVIBE-IPV survey that are split by the conditions indicated underneath the horizontal axes. The top figure (Panel A) uses all married women, while the bottom figure (Panel B) uses only those women without any physical IPV history. Standard errors, clustered on the province of military service, are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. All models control for (i) conditional unconfoundedness covariates, which include fixed effects for the draft year, husband's education, residence province, and an indicator variable for half-term service and (ii) pre-deployment characteristics (namely, service duration, fixed effects for draft age, and land ownership).

at least one child, this magnitude can be considered as minuscule. As in the newly-wed sample, employment and income status are not systematically related to conflict zone exposure of the husband.

Taken together, these findings support our theory of fear-induced submission whereby women who have less power to end their marriages (for example in the face of psychological or physical violence) are the ones who are forced into submission and adopt more gender-unequal views. In the bottom six plots, we repeat the same analyses, this time only among women who so far have not experienced physical IPV. Our results are qualitatively the same, once again hinting that perhaps the threat of physical violence may be sufficient to push some women into submission, especially so if they lack resources or opportunities to exit abusive or risky relationships.

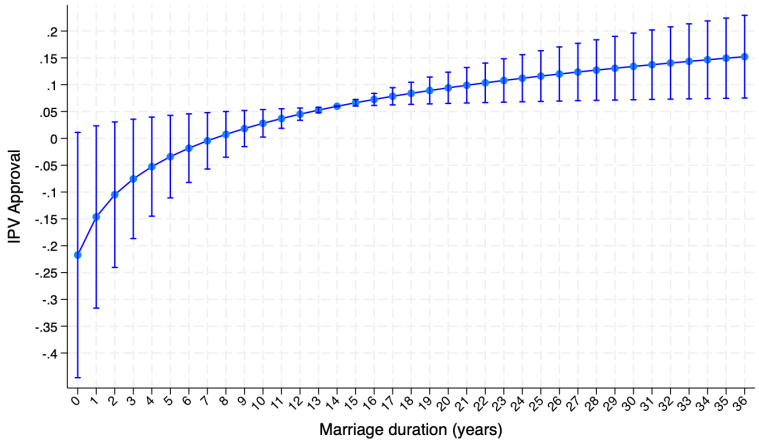
IPV approval by marriage duration. Our evidence suggests that husbands with conflict zone exposure are not only more likely to hold more authoritarian views but also more likely to suffer from self-control issues. This seems to be a dangerous combination that make them demonstrably more likely to engage in IPV. However, not all conflict zone men are violent, and there is uncertainty about physical IPV risk which is gradually resolved as the marriage progresses. Therefore, the mechanism we have proposed to explain IPV tolerance presupposes a dynamic learning process in which the wife's views and behavior may change in response to changing perceptions about IPV risk. Rising risk perceptions imply more submissive behavior and stronger IPV approval later in marriage. Our model predicts that other things equal the overall share of submissive wives should increase with marriage duration (see Proposition 1). We do not have a longitudinal sample to directly test this prediction. Instead, we use our cross-sectional survey to compare IPV attitudes of married women who are at different stages of their marriage at the time of the survey while controlling for age and other demographic factors.

In panel (a) of Figure 6 we document an increasing and nonlinear relationship between IPV acceptance and marriage duration in our sample.[32] The estimated relationship is conditioned on wife's age, wife's years of schooling, whether wife works for money as well as fixed effects for province of residence and household income bands. This positive and nonlinear relationship is in line with the prediction of our theoretical model, stated in Corollary 1 to 2, that the share of women with submissive attitudes will monotonically rise over time and eventually taper off in the limit. The evidence further demonstrates that toxic husbands with self-control problems are likely to reveal their aggression tendencies early in marriage, corresponding to high rates of abuse by aggressive men (e.g. high $\bar{q}_A$) and that acts of abuse are highly informative (e.g. high

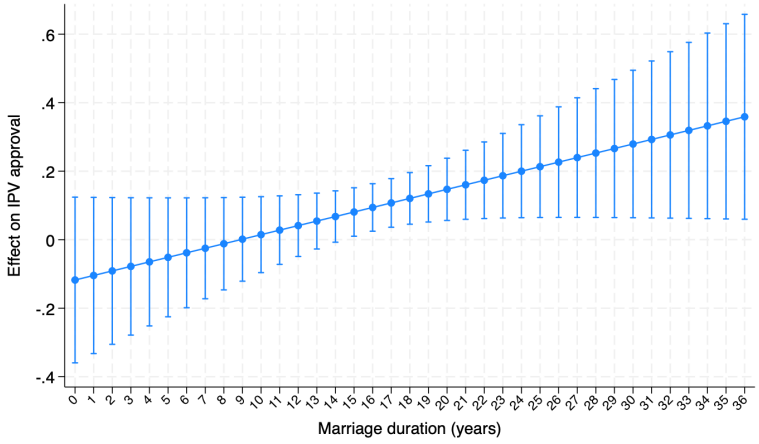
[32]The model we estimate via OLS relates IPV approval index to natural logarithm of marriage duration. If we instead fit a model where marriage duration enters linearly in levels on a subsample of women who were married for up to 16 years (median duration in our sample) we obtain a significant and larger positive coefficient on marriage length than if we use the whole sample, confirming the diminishing role of verbal aggression.

Figure 6: Women's IPV approval by marriage duration and heterogeneous effects of husband's conflict zone exposure

(a) Predicted IPV approval by marriage duration



(b) Effect of husband's conflict zone exposure and wife's IPV approval



Notes: The plot in panel (a) show predicted IPV approval that is based on an OLS regression of IPV approval of the wife on *log(1+marriage duration)*, controlling for (i) wife's age, (ii) wife's years of schooling, (iii) whether wife works for money, (iv) province of residence FE and (v) FE for household income brackets. The predictions hold all covariates except the marriage duration at their respective sample means. The marginal effects plot in panel (b) is based on OLS regression of IPV approval index on conflict zone indicator, marriage duration and the interaction of these two variables while controlling for (i) conditional unconfoundedness covariates, which include fixed effects for the draft year, husband's education, residence province, and an indicator variable for half-term service and (ii) pre-deployment characteristics (namely, service duration, fixed effects for draft age, and land ownership). 95% confidence intervals are displayed around each point estimate.

$\bar{q}_A/\bar{q}_N$).

The effects of conflict-zone husbands by marriage duration. Another prediction from our model is that the IPV approval gap between women with conflict and without conflict zone husbands increases over the course of marriage (see Corollary 1). To test this prediction, we first regress –using OLS– our IPV approval index on conflict zone indicator, marriage duration (in years) and their interaction while controlling for wife's age at marriage and other baseline regressors. In panel (b) of Figure 6 we plot the estimated marginal effects of husband's conflict exposure on IPV approval by women with different marriage lengths. Consistent with our predictions, the effects grow large and become positive later in marriage. The IPV approval gap between wives with conflict versus non-conflict zone husbands becomes significantly positive after around 15 years of marriage, and the effects reach to about 0.2 standard deviations around 10 more years later.

Husband type, verbal aggression and credibility of threats. In the model, we assume that verbal aggression serves as an informative signal about husband type and thus the probability of physical IPV in the future. Following a logic similar to that in Corollary 1, if non-aggressive husbands are relatively non-abusive, then our model predicts that the share of married women who report being victim to verbal aggression should increase faster among those who are married to conflict-zone husbands than those who are not. Consistent with this prediction, panel (a) in Figure 7, reports that the average verbal aggression gap between the two groups (women with and without conflict-zone husbands) widens with marriage duration. This result mirrors the similar pattern about IPV approval we have documented in panel (b) of Figure 6. The two results, considered together, support the idea that, for many women, increasing perceptions of IPV risk during the course of marriage might be an important reason why they adopt submissive gender norms in general and come to normalize physical IPV in particular.

The final prediction we test is about the role of verbal aggression as an early signal of physical IPV risk. Proposition 3 states –under some reasonable conditions– that, early in the marriage, among women who did not experience any physical IPV yet, those who faced verbal aggression will exhibit higher rates of submission (i.e. IPV approval) than those who did not experience any verbal aggression. The key prediction is that in the continued absence of physical violence, this positive gap tends to diminish later in marriage. This prediction derives from the expectation that, even though both verbal and physical aggression are informative about the future risk of physical IPV, the latter would be a more definitive signal than the former. Therefore, compared to recently married women, women who are well into their marriage with no physical IPV over the years, will be more confident that their husbands are of the non-aggressive type. Consequently,

verbal abuse early in a marriage is likely to cause a more significant belief update compared to verbal abuse that takes place well into a marriage with no physical IPV.

Figure 7b presents suggestive evidence supporting this prediction. Using the subsample of women without any physical IPV history, we regress our IPV approval index on the incidence of verbal abuse, marriage duration (in years) and their interaction while controlling for wife's age, wife's years of schooling, whether the wife works for money as well as fixed effects for province of residence and self-reported household income bands. The estimated partial correlations between verbal abuse and IPV approval indeed decline in size as we move from newlywed women to women with longer marriages. The estimates remain positive and significant only up to 14 years of marriage.[33]

Overall, the empirical patterns presented in this section provide additional support for our theory of fear-induced submission. In the next section, we outline other alternative mechanisms and evaluate their consistency with the empirical patterns we have documented.

4.4 Other Alternative Explanations

Empathy. One can argue that perhaps it is not fear and emotional trauma that make wives more conforming and IPV-approving, but a stronger empathy or pity they feel for their husbands knowing they might be traumatized, injured and hence broken after serving in the conflict zone.[34] Therefore, their responses to those questions about justifiability of IPV may reflect their tolerance towards the broken husband. However, this alternative scenario does not predict heterogenous effects based on the demographics of couples or outside options of the wife. In particular, we have no good reasons to think that women with limited outside options are more empathetic towards broken partners than women with higher exit capacity. It is also unlikely that conflict zone veterans married to women with limited outside options are more likely to be broken than those conflict zone veterans who are married to more resourceful women. Yet, in Figure 5 we show that our results are mainly driven by groups of women who are less resourceful and has predictably lower power to exit abusive relationships. This finding is more consistent with the predictions of the fear and trauma-based mechanisms, rather than pity or empathy for victimized husbands.

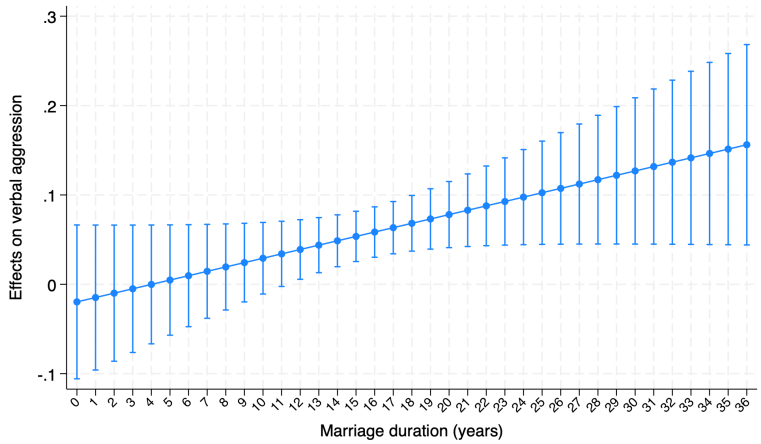
We also further tested the empathy channel in the EXPOVIBE-CV sample. In Appendix Table A.10, we first show that, among those husbands who served in conflict zone, having been

[33]The result in Proposition 3 requires outside option x of women from divorce to be sufficiently low. Hence, we confirm in the Appendix in Figures A.1 and A.2 that the decline over time in the estimated association between verbal abuse and IPV approval is more steep and significant in the subsamples of women with limited exit options.

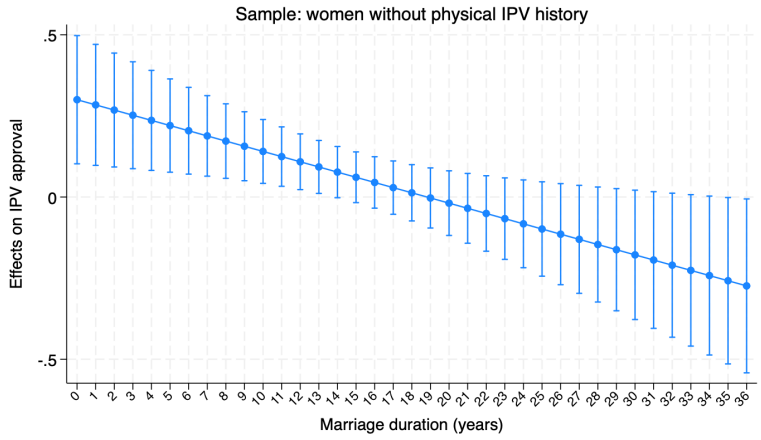
[34]Those men who were either injured during combat and/or witnessed combat casualities constitute 15.7% of the relevant subsample of veterans who are married to 25-50 years old women.

Figure 7: Conflict zone exposure, verbal aggression and IPV approval: heterogeneity with respect to marriage duration

(a) Husband's conflict zone exposure and verbal aggression (all married women)



(b) Verbal aggression and IPV approval (married women without physical IPV history)



Notes: The marginal effects plot in Panel (a) is based on OLS regression of verbal aggression indicator on conflict zone indicator, marriage duration and the interaction of these two variables while controlling for (i) conditional unconfoundedness covariates, which include fixed effects for the draft year, husband's education, residence province, and an indicator variable for half-term service and (ii) pre-deployment characteristics (namely, service duration, fixed effects for draft age, and land ownership). The marginal effects plot in Panel (b) is based on OLS regression of IPV approval on verbal aggression indicator while controlling for (i) wife's age, (ii) wife's years of schooling, (iii) whether wife works for money, (iv) province of residence FE and (v) FE for household income brackets. 95% confidence intervals are displayed around each point estimate.

injured during combat or having witnessed combat casualties does not predict any of the marriage or wife characteristics we use as our indicators of high versus low exit capacity for wives. Then we establish that the effect of conflict zone service on the likelihood of either getting injured during combat or witnessing combat casualties (our proxy for the likelihood of being a 'broken' husband) does not significantly differ between men who later on married women that we classified as having lower versus higher exit capacity.[35] We find no significant heterogeneity in the effect of conflict zone deployment with respect to any of the exit capacity proxies. This implies that the heterogenous effects we report in Figure 5 are very unlikely to be an artifact of a matching between physically or psychologically broken husbands and women with low outside options.

Social learning. Another possible mechanism is normalization of violence by women via social learning, and in particular due to within-family value spillovers. Darwinian models of the evolution of norms assume that culture is a system of inheritance in which beliefs and values that affect behavior are transmitted from individual to individual by social learning (Robert and Richerson, 1994). People acquire beliefs and values by observing the behavior of others (Bandura, 1973). However, even if there is a value transmission from husband to wife, it is not clear why this effect should be systematically stronger among women with more vulnerable demographics and fewer exit options. One can perhaps argue that women with weaker outside options are also likely to be more impressionable. Even if so, it is hard to reconcile this story with our observations without explaining, for example, why women with kids should be more impressionable than those without, or why wives of conflict zone veterans are more likely to indicate fear of their husbands.

Selective divorce. Our regression results rely on a sample of married women. Therefore, survivor bias due to selective divorce is a crucial issue we need to address. Other things equal, women who are married to aggressive husbands may be more likely to get a divorce and drop out of our sample. Those who choose not to separate despite having aggressive husbands can be inherently more tolerant of IPV, leading to a spurious positive relationship between partners' conflict zone deployment (which contributes to aggression among men) and IPV-accepting views among women. However, a corollary to such selective divorce is that it should be more prevalent among women who have a greater ability to exit abusive relationships. Thus, we would expect the upward bias in conflict zone estimates to be more pronounced in subsamples of married women who are objectively more likely to get a divorce. Yet, as evident from Figure 5, our findings

[35] See column 6 of Table A.10, where we regress a binary indicator for 'having been injured or having witnessed combat casualties' during military service on our conflict zone dummy, being in a non-consensual marriage, marrying to a teen bride, a college-educated wife, a working wife and having kids and the interactions of these variables with conflict zone dummy, while controlling for our baseline pre-deployment characteristics and unconfoundedness covariates.

indicate the opposite. The positive relationships between conflict zone deployment on the one hand and IPV approval on the other are systematically stronger among groups of women with predictably more limited exit options. In other words, we find positive and significant effects in samples where divorce (and in particular, IPV-related divorce) is less likely. Therefore, selective divorce is unlikely to explain our results.

It is worth pointing out that the results in Figure 6 further support our argument that our main findings cannot be explained by selective marriage. If the effects of husbands' conflict zone exposure on wives' IPV approval is driven by selective marriage, the IPV approval gap should also be positive and significant among newlyweds. That is clearly not what we find. Furthermore, if women with inherently IPV-tolerant views are less likely to get a divorce when exposed to conflict zone husbands, we would expect the gap in IPV approval to close over time because the type composition of women without conflict zone husbands should become similar to the type composition of women married to conflict zone husbands. This happens because less tolerant types (which were more abundant in the latter group) exit abusive relationships. Our findings are certainly contrary to these predictions.

5 Conclusion

This paper tackles an understudied question in the literature on gender-based violence: What explains the high tolerance towards IPV among women? We make various contributions to the existing literature. Using a quasi-natural experiment afforded by the Turkish military service deployment lottery, we show that experience of conflict and military socialization of men in conflict zones have far-reaching consequences. Our first contribution is to show that this experience makes men more norm-seeking (raising their demand for obedience and discipline) and increases the odds they will use violence when faced with potential triggers. These changes could occur due to various factors including a different kind of military socialization in conflict zones (e.g. assimilating into a more intense culture of violence, discipline and punishment), due to a different kind of training in conflict zones (e.g. being toughened through training and combat experience) or due to psychological effects like self-regulation problems (e.g. caused by the trauma from combat experience or witnessing battle deaths). Ultimately, military service has an important effect on the distribution of husband types in the marriage market. Our second and main contribution is to show that women married to conflict-zone husbands view domestic violence as more tolerable. Our third contribution is to show that exposure to physical violence by husbands is not the only channel through which husband type affects IPV norms: Other forms of aggression (like verbal and emotional abuse) can be enough of a threat to induce submission and acceptance of punishment. As a result, particularly those women, who have more limited exit options (and

hence are more vulnerable), can report greater approval of IPV.

Our findings have important implications. First, conflict experience of men can be an important contributor to the culture of violence. Second, fear of violence seems to reinforce submission and acceptance of IPV even among women who have so far been spared from systematic IPV. These self-defeating norms can be an important obstacle to the fight against IPV by normalizing IPV and stripping IPV victims from potential allies.

A Appendix: Tables and Figures

Table A.1: Evidence on the Exogeneity of Armed Conflict Zone Deployment, EXPOVIBE-CV Sample, Individual Regressions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sample:		Full sample			Married Men			Married Men (with controls in the IPV sample)	
Sub-sample:	All	High school	College	All	High school	College		High school	College
Dependent variable	Conflict vs Non-conflict	Conflict vs Non-conflict	Conflict vs Non-conflict	Conflict vs Non-conflict	Conflict vs Non-conflict	Conflict vs Non-conflict	Conflict vs Non-conflict	Conflict vs Non-conflict	Conflict vs Non-conflict
Birth-Quarter: Second	-0.0186	-0.0236	0.0198	0.0034	-0.0022	0.0414	-0.0043	-0.0097	0.0502
	(0.0179)	(0.0195)	(0.0302)	(0.0177)	(0.0203)	(0.0400)	(0.0184)	(0.0203)	(0.0434)
Birth-Quarter: Third	-0.0102	-0.0172	0.0015	0.0066	-0.0006	-0.0231	0.0079	0.0016	-0.0076
	(0.0179)	(0.0192)	(0.0395)	(0.0177)	(0.0202)	(0.0426)	(0.0170)	(0.0195)	(0.0370)
Birth-Quarter: Fourth	-0.0215	-0.0294	0.0246	-0.0136	-0.0279	0.0785	-0.0137	-0.0293	0.0912
	(0.0267)	(0.0296)	(0.0371)	(0.0299)	(0.0337)	(0.0581)	(0.0304)	(0.0358)	(0.0640)
Land Owner	-0.0126	-0.0099	0.0083	-0.0157	-0.0104	0.0065	-0.0195	-0.0149	-0.0006
	(0.0162)	(0.0171)	(0.0410)	(0.0191)	(0.0191)	(0.0523)	(0.0202)	(0.0198)	(0.0532)
Martyr in Family	0.0364	0.0280	0.0792*	0.0243	0.0116	0.0712	0.0483	0.0423	0.0735
	(0.0222)	(0.0242)	(0.0425)	(0.0281)	(0.0301)	(0.0491)	(0.0305)	(0.0317)	(0.0468)
Turkish Ethnicity	-0.0522	-0.0889**	0.1064*	-0.0810	-0.1243*	0.0624	-0.0803*	-0.1212**	0.0344
	(0.0346)	(0.0446)	(0.0575)	(0.0524)	(0.0640)	(0.0664)	(0.0480)	(0.0600)	(0.0619)
Kurdish Ethnicity	-0.0266	-0.0582	0.0764	-0.0646	-0.1035	0.0372	-0.0668	-0.1054	0.0046
	(0.0413)	(0.0488)	(0.0823)	(0.0590)	(0.0702)	(0.0946)	(0.0539)	(0.0659)	(0.0933)
Conscription Age	-0.0080**	-0.0099	-0.0022	-0.0050	-0.0052	-0.0018	-0.0065	-0.0060	-0.0039
	(0.0036)	(0.0065)	(0.0068)	(0.0047)	(0.0061)	(0.0082)	(0.0049)	(0.0062)	(0.0084)
Rank: Corporal	-0.0120	-0.0123	-0.0111	0.0011	-0.0125	0.1659*	-0.0117	-0.0291	0.1605*
	(0.0224)	(0.0223)	(0.0530)	(0.0326)	(0.0302)	(0.0983)	(0.0349)	(0.0320)	(0.0942)
Rank: Sergeant	0.0047	0.0190	-0.0348	0.0142	0.0189	-0.0011	0.0189	0.0246	0.0163
	(0.0215)	(0.0258)	(0.0374)	(0.0253)	(0.0324)	(0.0420)	(0.0253)	(0.0308)	(0.0360)
Rank: Sub-Lieutenant	0.0100		-0.0206	-0.0331		-0.0483	-0.0158		-0.0224
	(0.0704)		(0.0804)	(0.0987)		(0.1180)	(0.0952)		(0.1069)
Service Duration	-0.0013	-0.0011	0.0033	-0.0129	-0.0135	-0.0066	-0.0120	-0.0132	-0.0045
	(0.0088)	(0.0109)	(0.0135)	(0.0103)	(0.0118)	(0.0195)	(0.0103)	(0.0116)	(0.0208)
Observations	4,965	4,225	740	3,590	3,110	480	3,590	3,110	480
R-squared	0.118	0.131	0.164	0.137	0.152	0.243	0.070	0.078	0.171
F-test	1.549	1.230	0.765	0.743	0.590	0.903	0.854	0.754	1.015
Prob > F	0.123	0.281	0.683	0.706	0.832	0.548	0.595	0.684	0.445

Notes: These estimates are obtained by regressing Conflict Zone indicator **separately** on the following sets of observable pre-deployment characteristics (i) Birth-quarter dummies,(ii) land ownership dummy, (iii) martry in the family dummy, (iv) Turkish and Kurdish ethnicity dummies, (v) conscription age, (vi) military rank FEs and (vii) military service duration. Regressions are weighted using sampling weights. Standard errors, clustered on the province of military service, in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. Models in Columns (1)-(6) control for conditional unconfoundedness covariates, including height, and fixed effects for military occupation, branch of service, half-term service, draft year, education, and residence province. Models in Columns (7)-(9) control for conditional unconfoundedness covariates available in the EXPOVIBE-IPV sample, including fixed effects for husband's draft year and education, residence province, and half-term service.

Table A.2: The Impact of Conflict Zone Deployment on Direct Armed Combat Experiences

Panel A: Extensive margin	(1)	(2)	(3)	(4)
Dependent variable:	Armed Combat	Witnessed Casualties	Injured	Any Direct Combat
Conflict Zone	0.349***	0.286***	0.044***	0.395***
	(0.037)	(0.027)	(0.008)	(0.039)
Observations	3,587	3,577	3,585	3,587
R-squared	0.341	0.255	0.081	0.321
Panel B: Intensive margin	(1)	(2)	(3)	(4)
Dependent variable:	Armed Combat	Witnessed Casualties	Injured	Any Direct Combat
Conflict Zone Moderate Combat	0.223***	0.191***	0.024**	0.284***
	(0.029)	(0.024)	(0.010)	(0.034)
Conflict Zone Intense Combat	0.453***	0.364***	0.059***	0.485***
	(0.036)	(0.028)	(0.014)	(0.040)
Observations	3,587	3,577	3,585	3,587
R-squared	0.360	0.266	0.084	0.332

Notes: These estimates are obtained using sampling weights from the EXPOVIBE-CV sample. Standard errors, clustered on the province of military service, are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Table A.3: Summary Statistics of Aggression and Norm Tightness by Conflict Zone Deployment, CV Married Sample

	Full Sample	Non-conflict Zone	Conflict Zone	Conflict Zone Moderate Combat	Conflict Zone Intense Combat
Ready to Use Violence if Necessary	0.266	0.2607	0.2839	0.316	0.2589
	(0.4419)	(0.4391)	(0.4512)	(0.4655)	(0.4385)
Ready to Use Violence if Provoked	0.1367	0.1288	0.1636	0.1497	0.1743
	(0.3436)	(0.335)	(0.3701)	(0.3573)	(0.3797)
Not a Calm Person	0.0827	0.0773	0.1008	0.0875	0.1111
	(0.2754)	(0.2671)	(0.3013)	(0.2829)	(0.3145)
Trouble Controlling Anger	0.0567	0.0551	0.062	0.05	0.0712
	(0.2313)	(0.2282)	(0.2414)	(0.2183)	(0.2575)
Kids should learn discipline and respect authority	0.2911	0.2859	0.3086	0.3399	0.2845
	(0.4543)	(0.4519)	(0.4622)	(0.4743)	(0.4516)
Obedience discipline and morals are key	0.2817	0.2714	0.3166	0.3038	0.3264
	(0.4499)	(0.4448)	(0.4654)	(0.4605)	(0.4694)
Observations	3590	2698	892	400	492

Notes: Mean values of indicators. Standard errors in parentheses. Summary statistics are obtained using sampling weights from the EXPOVIBE-CV sample.

Table A.4: Combat Intensity during Husband's Conflict Zone Service and Wife's IPV Approval

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dependent variable:	IPV approval index (ICW)								
Conflict Zone Moderate Combat	0.099**	0.088*	0.093**	0.096**	0.083*	0.227	0.206	0.083	0.076
	(0.047)	(0.048)	(0.047)	(0.048)	(0.049)	(0.232)	(0.258)	(0.059)	(0.057)
Conflict Zone Intense Combat	0.178***	0.171***	0.167***	0.181***	0.170***	0.245**	0.223**	0.190**	0.189**
	(0.044)	(0.043)	(0.042)	(0.044)	(0.041)	(0.101)	(0.104)	(0.087)	(0.085)
Wife Years of Schooling		-0.048***			-0.046***		-0.029		-0.038***
		(0.007)			(0.007)		(0.022)		(0.006)
Wife Age		0.001			-0.006		0.007		-0.000
		(0.008)			(0.006)		(0.048)		(0.005)
Wife Works for Money		-0.010			-0.009		-0.098		-0.008
		(0.037)			(0.037)		(0.163)		(0.039)
Teen bride (marriage age < 20)			-0.023		-0.062		-0.063		-0.071
			(0.062)		(0.060)		(0.230)		(0.057)
Marriage Duration			0.012*		0.010		-0.052		0.014*
			(0.007)		(0.007)		(0.051)		(0.007)
Consent Marriage			-0.104		-0.042		-0.174		0.047
			(0.082)		(0.080)		(0.155)		(0.083)
Parental IPV				0.090*	0.089*		0.138		0.042
				(0.051)	(0.047)		(0.125)		(0.053)
In-laws IPV				0.055	0.054		0.102		-0.006
				(0.046)	(0.045)		(0.151)		(0.047)
Sample:	All women	All women	All women	All women	All women	Married before milit. Serv.	Married before milit. Serv.	No physical IPV history	No physical IPV history
Observations	4,778	4,778	4,778	4,778	4,778	429	429	3,986	3,986
R-squared	0.212	0.228	0.216	0.215	0.231	0.265	0.285	0.212	0.227
Sample mean of outcome	0.015	0.015	0.015	0.015	0.015	0.052	0.052	-0.033	-0.033
SD of outcome	1.002	1.002	1.002	1.002	1.002	1.050	1.050	0.956	0.956

Notes: These estimates are obtained using sampling weights from the sample of married women (ages 25 - 50) interviewed by the EXPOVIBE-IPV survey, whose husbands served in the military between 1984 and 2011. *Conflict Zone Moderate Combat* [*Conflict Zone Intense Combat*] is equal to one if and only if the husband served in a conflict zone and, in the province where he served, the combat-related casualties during his service period were below [above] the median number of casualties. Standard errors, clustered on the province of military service, are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. All models control for (i) conditional unconfoundedness covariates, which include fixed effects for the draft year, husband's education, residence province, and an indicator variable for half-term service, as well as (ii) pre-deployment characteristics (namely, service duration, fixed effects for draft age, and land ownership.

Table A.5: Selection into marriage with conflict zone husbands?

Panel A:						
Sample: All Women	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable	Parental IPV	In-laws IPV	Wife Age at Marriage	Age Difference with Husband	Consent Marriage	Wife Years of Schooling
Conflict Zone	-0.010	0.027	-0.414***	0.006	-0.036*	-0.112
	(0.025)	(0.021)	(0.126)	(0.173)	(0.020)	(0.100)
Observations	5,460	4,790	5,472	5,472	5,472	5,467
R-squared	0.054	0.101	0.170	0.194	0.207	0.467
Panel B:						
Sample: Marriage duration $\leq$ 5 years						
	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable	Parental IPV	In-laws IPV	Wife Age at Marriage	Age Difference with Husband	Consent Marriage	Wife Years of Schooling
Conflict Zone	-0.046	-0.020	-0.620**	0.370	-0.032*	0.391
	(0.032)	(0.041)	(0.293)	(0.343)	(0.018)	(0.242)
Observations	608	491	610	610	610	610
R-squared	0.171	0.300	0.614	0.398	0.222	0.442

Notes: These estimates are obtained using sampling weights from the sample of married women (ages 25 - 50) interviewed by the EXPOVIBE-IPV survey, whose husbands served in the military between 1984 and 2011. Standard errors, clustered on the province of military service, are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. All models control for (i) conditional unconfoundedness covariates, which include fixed effects for the draft year, husband's education, residence province, and an indicator variable for half-term service, as well as (ii) pre-deployment and women's characteristics (namely, service duration, fixed effects for draft age, land ownership of the respondent.

Table A.6: Conflict zone husbands and additional wife outcomes relevant for exit capacity

Panel A: Sample: Marriage duration $\leq$ 5 years	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variables:	Has Child(ren)	Number of Children	Has full-time paid employment	Has personal income	Strong risk avoidance	Little/no control over own life
Conflict Zone	0.021	0.007	-0.039	-0.033	0.049	0.002
	(0.034)	(0.049)	(0.035)	(0.052)	(0.043)	(0.039)
Observations	610	610	610	607	609	589
R-squared	0.298	0.276	0.305	0.313	0.201	0.246
Panel B: Sample: All Women						
Dependent variables:	Has Child(ren)	Number of Children	Has full-time paid employment	Has personal income	Strong risk avoidance	Little/no control over own life
Conflict Zone	0.020**	0.051	-0.008	-0.023	0.050**	-0.012
	(0.009)	(0.037)	(0.010)	(0.015)	(0.021)	(0.026)
Observations	5,472	5,472	5,471	5,457	5,448	5,362
R-squared	0.184	0.258	0.129	0.113	0.087	0.160

Notes: These estimates are obtained using sampling weights from the sample of married women (ages 25 - 50) interviewed by the EXPOVIBE-IPV survey, whose husbands served in the military between 1984 and 2011. Standard errors, clustered on the province of military service, are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. All models control for (i) conditional unconfoundedness covariates, which include fixed effects for the draft year, husband's education, residence province, and an indicator variable for half-term service, as well as (ii) pre-deployment and women's characteristics (namely, service duration, fixed effects for draft age, land ownership of the respondent.

Table A.7: The positive relationship between fear of husband and IPV tolerance in NSDVW-2014 Sample

	(1)	(2)	(3)	(4)	(5)
Dependent variable:	IPV approval index (ICW)				
Lifetime IPV (physical, sexual or psychological violence)	0.145***		0.111***	0.078***	0.083***
	(0.023)		(0.024)	(0.024)	(0.023)
Respondent is afraid of the partner		0.250***	0.212***	0.152***	0.150***
		(0.041)	(0.044)	(0.046)	(0.047)
High school				-0.274***	-0.264***
				(0.024)	(0.025)
College or above				-0.248***	-0.252***
				(0.037)	(0.037)
Number of kids in HH				0.011	0.001
				(0.015)	(0.014)
Urban				-0.230***	-0.228***
				(0.049)	(0.050)
Kurdish				0.569**	0.275
				(0.262)	(0.253)
Arabic				-0.111*	0.094
				(0.057)	(0.088)
Age				-0.003	-0.004
				(0.005)	(0.005)
Has own income				-0.047	-0.042
				(0.041)	(0.040)
Teen bride				-0.002	-0.019
				(0.044)	(0.043)
Last marriage was arranged				0.080***	0.073**
				(0.030)	(0.029)
Duration of last marriage				0.005	0.007
				(0.004)	(0.004)
Observations	3,866	3,866	3,866	3,866	3,866
R-squared	0.008	0.012	0.016	0.082	0.123
Province FE	No	No	No	No	Yes
Sample mean of outcome	-0.101	-0.101	-0.101	-0.101	-0.101
SD of outcome	0.862	0.862	0.862	0.862	0.862

Notes: In this table we present evidence from Turkish National Survey on Domestic Violence against Women (NSDVW) Yüksel Kaptanoğlu et al. (2015) that both IPV exposure and fear of partner are strong predictors of IPV approval by women.

Table A.8: Summary Statistics - EXPOVIBE-CV Married Sample

	N	Mean	Std. Dev.	Min	Max
Treatment variables					
Conflict Zone	3590	0.248	0.432	0	1
Conflict Zone Moderate Combat	3590	0.111	0.315	0	1
Conflict Zone Intense Combat	3590	0.137	0.344	0	1
Outcome variables					
Ready to Use Violence if Necessary	3579	0.244	0.430	0	1
Ready to Use Violence if Provoked	3580	0.142	0.350	0	1
Not a Calm Person	3565	0.084	0.278	0	1
Trouble Controlling Anger	3570	0.055	0.228	0	1
Kids should learn discipline and respect authority	3548	0.304	0.460	0	1
Obedience, discipline and morals are key	3554	0.289	0.453	0	1
Anger-Violence Index	3586	0.020	1.006	-2.490	2.647
Obedience-Discipline Index	3576	0.038	0.993	-2.466	1.375
Pre-deployment Characteristics					
Birth-Quarter: Second	3590	0.248	0.432	0	1
Birth-Quarter: Third	3590	0.239	0.427	0	1
Birth-Quarter: Fourth	3590	0.170	0.376	0	1
Birth quarter missing	3590	0.002	0.044	0	1
Land Owner	3590	0.220	0.414	0	1
Land ownership status missing	3590	0.027	0.161	0	1
Martyr in Family	3590	0.135	0.342	0	1
Martry in family missing	3590	0.003	0.053	0	1
Turkish Ethnicity	3590	0.910	0.286	0	1
Kurdish Ethnicity	3590	0.065	0.246	0	1
Ethnicity missing	3590	0.000	0.017	0	1
Conscription Age	3590	20.584	1.688	18	33
Rank: Corporal	3590	0.064	0.245	0	1
Rank: Sergeant	3590	0.137	0.344	0	1
Rank: Sub-Lieutenant	3590	0.009	0.093	0	1
Service Duration	3590	16.650	2.500	5	24
Unconfoundedness controls					
Height in Centimeters	3590	175.350	6.791	150	199
Air Force	3590	0.029	0.167	0	1
Gendarmerie	3590	0.323	0.468	0	1
Navy	3590	0.027	0.163	0	1
Branch: Missing	3590	0.045	0.208	0	1
Military Occupation: Combat Support	3590	0.052	0.222	0	1
Military Occupation: Communication	3590	0.084	0.277	0	1
Military Occupation: Construction	3590	0.012	0.110	0	1
Military Occupation: Health Services	3590	0.017	0.129	0	1
Military Occupation: Intelligence	3590	0.006	0.074	0	1
Military Occupation: Supply Chain & Material Management	3590	0.019	0.135	0	1
Military Occupation: Human Resource Training	3590	0.026	0.158	0	1
Military Occupation: Protective Services	3590	0.191	0.393	0	1
Military Occupation: Support Services	3590	0.096	0.295	0	1
Military Occupation: Technical Support Services	3590	0.031	0.174	0	1
Military Occupation: Transportation and Material Handling	3590	0.124	0.330	0	1
Military Occupation: Unclassified	3590	0.027	0.161	0	1
Half term military service	3590	0.036	0.185	0	1
Induction Year	3590	1997.218	6.685	1984	2011
Years of Schooling	3590	9.022	3.275	0	20

Notes: Summary statistics for the married men in the EXPOVIBE-CV sample whose wives are 25-50 years old.

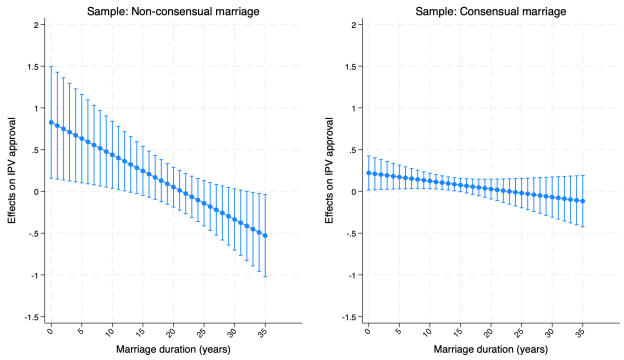
Table A.9: Summary Statistics - EXPOVIBE-IPV Sample

	N	Mean	Std. Dev.	Min	Max
Treatment variables					
Conflict Zone	5476	0.228	0.420	0	1
Conflict Zone Moderate Combat	5476	0.115	0.319	0	1
Conflict Zone Intense Combat	5476	0.114	0.317	0	1
Outcome variables					
IPV history	5470	0.267	0.442	0	1
Physical IPV history	5468	0.165	0.372	0	1
IPV approval index	5473	0.015	1.001	-0.830	4.627
Any verbal abuse	5471	0.218	0.413	0	1
Scared to refuse sex	5436	0.053	0.223	0	1
Pre-deployment characteristics					
Service Duration	5472	16.184	3.145	1	30
Conscription Age	5476	20.711	1.802	18	36
Unconfoundedness controls					
Husband Years of Schooling	5476	9.226	3.445	0	20
Induction Year	5476	1998.268	7.130	1984	2011
Half term military service	5476	0.051	0.220	0	1
Individual and marriage characteristics					
Land owner	5476	0.062	0.242	0	1
Land ownership status missing	5476	0.002	0.045	0	1
Wife Years of Schooling	5471	8.277	3.679	0	20
Wife Age	5476	37.957	6.703	24	51
Wife Works for Money	5476	0.244	0.430	0	1
Has full-time paid employment	5475	0.183	0.387	0	1
Has personal income	5476	2.021	5.101	1	99
Have Child(ren)	5476	0.914	0.281	0	1
Teen bride (marriage age < 20)	5476	0.313	0.464	0	1
Marriage Duration	5476	16.026	8.095	0	36
Consent Marriage	5476	0.842	0.365	0	1
Parental IPV	5464	0.235	0.424	0	1
In-laws IPV	4793	0.272	0.445	0	1

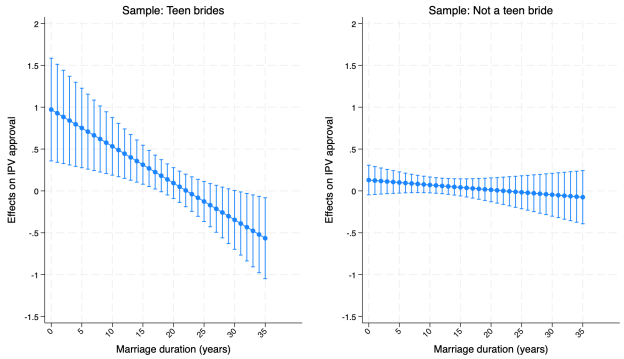
Notes: Summary statistics for the married women in the EXPOVIBE-IPV sample whose husbands served in the military in the period 1984-2011.

Figure A.1: The relationship between IPV approval and verbal aggression (by marriage duration) among women without physical IPV history: heterogeneity with respect to exit options of women (part I)

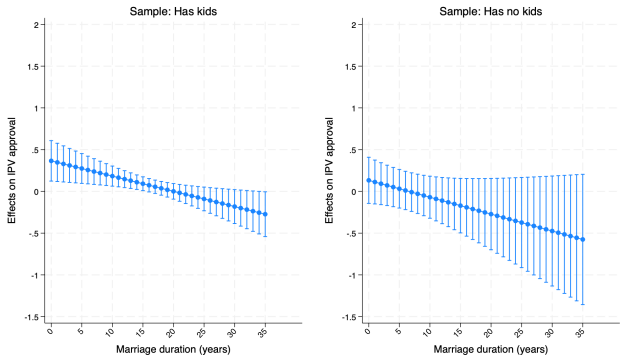
(a) Sample split by: Consensual vs. non-consensual marriage



(b) Sample split by: Wife's age at marriage



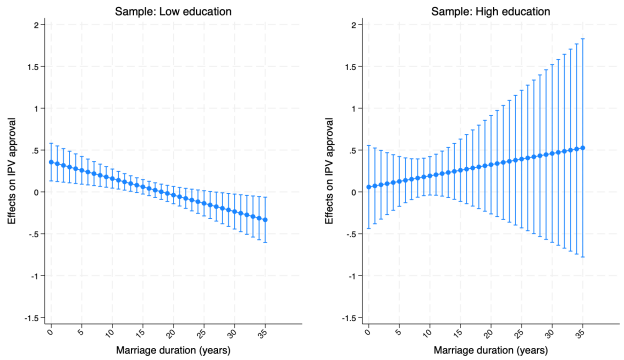
(c) Sample split by: Kids vs. no-kids in marriage



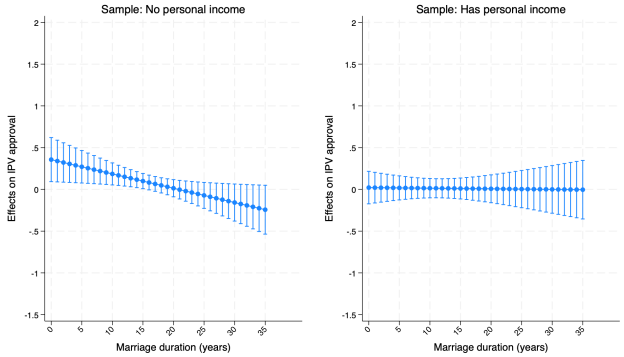
Notes: All marginal effect plots are based on OLS regression of IPV approval on verbal aggression indicator while controlling for (i) wife's age, (ii) wife's years of schooling, (iii) whether wife works for money, (iv) province of residence FE and (v) FE for household income brackets. In all regressions, the sample is confined by married women without any physical IPV history. Left hand-side [right hand-side] plots in each panel report the marginal differences in IPV approval with respect to verbal aggression history among the sub-sample of women with demonstrably weaker [stronger] exit options as captured by a particular characteristic of the marriage. 95% confidence intervals are displayed around each point estimate.

Figure A.2: The relationship between IPV approval and verbal aggression by marriage duration: heterogeneity with respect to exit options of women (part II)

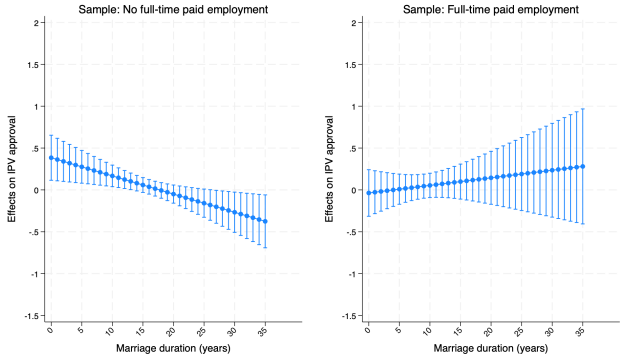
(a) Sample split by: Low vs. high education of the wife



(b) Sample split by: Wife's personal income status



(c) Sample split by: Wife's employment status



Notes: All marginal effect plots are based on OLS regression of IPV approval on verbal aggression indicator while controlling for (i) wife's age, (ii) wife's years of schooling, (iii) whether wife works for money, (iv) province of residence FE and (v) FE for household income brackets. In all regressions, the sample is confined by married women without any physical IPV history. Left hand-side [right hand-side] plots in each panel report the marginal differences in IPV approval with respect to verbal aggression history among the sub-sample of women with demonstrably weaker [stronger] exit options as captured by a particular wife characteristic. 95% confidence intervals are displayed around each point estimate.

Table A.10: Evaluating the relevance of empathy channel

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Consent Marriage	Wife was teen bride	Wife with college degree or higher	Wife Works for Money	Couple has Child(ren)	Injured or Witnessed casualties
Injured or Witnessed Casualties	-0.007	-0.034	0.019	-0.017	-0.008	
	(0.016)	(0.042)	(0.024)	(0.033)	(0.014)	
Conflict Zone						0.233**
						(0.099)
Consent Marriage						0.026
						(0.020)
Conflict Zone x Consent Marriage						-0.018
						(0.052)
Teen bride						0.028
						(0.022)
Conflict Zone x Teen bride						-0.000
						(0.049)
Wife with college education or above						0.004
						(0.020)
Conflict Zone x Wife with college education or above						0.010
						(0.054)
Wife Works for Money						-0.034
						(0.023)
Conflict Zone x Wife Works for Money						-0.013
						(0.044)
Has Child(ren)						-0.061
						(0.037)
Conflict Zone x Has Child(ren)						0.099
						(0.066)
Sample	OHAL husbands	OHAL husbands	OHAL husbands	OHAL husbands	OHAL husbands	All husbands
Observations	884	884	884	884	884	3,565
R-squared	0.217	0.201	0.417	0.183	0.210	0.277

Notes: These estimates are obtained using sampling weights. The sample consists of married men in the EXPOVIBE-CV survey who are married to women ages 25-50. Standard errors, clustered on the province of military service, in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. All dependent variables are binary indicators as described. In columns 1-5, the analysis is further restricted to a subsample who served in the conflict zone. All models include controls for (i) pre-deployment characteristics of the husband (service length, draft age, military rank, birth quarter, landownership status, having a martyr in the family, and ethnicity) and (ii) fixed effects for draft year, educational attainment, and residence province of men. Since the model in column 6 contains our conflict zone treatment, it additionally controls for (iii) the other conditional unconfoundedness covariates (height, military branch, occupation, and half-term service indicators).

Table A.11: Evaluating potential reporting bias in EXPOVIBE-IPV survey

Panel A:	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	IPV approval index (ICW)		Physical IPV		Verbal abuse	
"Respodent fully sincere"	-0.121	-0.107	0.038*	0.038	0.041	0.036
	(0.077)	(0.077)	(0.022)	(0.025)	(0.025)	(0.029)
Wife Years of Schooling		-0.045***		-0.003		-0.006
		(0.008)		(0.003)		(0.004)
Wife Age		-0.005		0.000		0.001
		(0.005)		(0.002)		(0.002)
Wife Works for Money		-0.016		-0.001		0.064***
		(0.062)		(0.015)		(0.012)
Teen bride (marriage age < 20)		-0.058		0.049		0.043*
		(0.063)		(0.030)		(0.023)
Marriage Duration		0.011		0.003		0.001
		(0.007)		(0.002)		(0.002)
Consent Marriage		-0.052		-0.096***		-0.080***
		(0.070)		(0.019)		(0.016)
Parental IPV		0.079**		0.068*		0.074*
		(0.031)		(0.035)		(0.039)
In-laws IPV		0.074		0.200***		0.234***
		(0.063)		(0.024)		(0.027)
Sample:	All married women	All married women	All married women	All married women	All married women	All married women
Observations	5,473	4,781	5,468	4,777	5,471	4,780
R-squared	0.236	0.211	0.093	0.214	0.053	0.188
Sample mean of outcome	0.01	0.02	0.17	0.16	0.22	0.22
SD of outcome	1.00	1.00	0.37	0.37	0.41	0.41

Panel B:	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	"Respodent fully sincere"		IPV approval index (ICW)			
Conflict Zone	-0.004	-0.007	0.155***	0.124***	0.150***	0.131***
	(0.015)	(0.016)	(0.042)	(0.040)	(0.051)	(0.049)
R was fully sincere						
Wife Years of Schooling		-0.003		-0.049***		-0.043***
		(0.003)		(0.006)		(0.006)
Wife Age		0.004		-0.004		0.004
		(0.002)		(0.007)		(0.006)
Wife Works for Money		-0.021		0.013		0.009
		(0.018)		(0.040)		(0.039)
Teen bride (marriage age < 20)		0.017		-0.048		-0.067
		(0.017)		(0.068)		(0.070)
Marriage Duration		-0.006***		0.013*		0.017**
		(0.002)		(0.007)		(0.008)
Consent Marriage		0.015		-0.082		0.003
		(0.018)		(0.102)		(0.112)
Parental IPV		0.016		0.087		0.026
		(0.021)		(0.054)		(0.064)
In-laws IPV		0.030**		0.114**		0.079
		(0.014)		(0.049)		(0.051)
Sample:	All married women	All married women	Married women fully sincere	Married women fully sincere	Married women without Physical IPV fully sincere	Married women without Physical IPV fully sincere
Observations	5,472	4,780	3,630	3,630	3,015	3,015
R-squared	0.315	0.316	0.232	0.257	0.214	0.237
Sample mean of outcome	0.75	0.76	-0.05	-0.05	-0.11	-0.11
SD of outcome	0.43	0.43	1.00	1.00	0.94	0.94

Notes:

B Appendix: Proofs

Proof of Proposition 1. For a given outside option x, among women with a husband of type $\theta \in \{A, N\}$, let $\mathbf{S}_t(x, \theta)$ denote the share of women engaging in submission and $\mathbf{M}_t(x, \theta)$ the share of women remaining married in period t of the marriage. The period t submission rate of married women whose husband has treatment status $\tau \in \{T, C\}$ is

$$\rho_t(x, \tau) = \frac{\mathbf{S}_t(x, A)\mu_\tau + \mathbf{S}_t(x, N)(1 - \mu_\tau)}{\mathbf{M}_t(x, A)\mu_\tau + \mathbf{M}_t(x, N)(1 - \mu_\tau)}. \tag{3}$$

Let $H_t(x, \mu)$ denote the set of period-t histories in which a woman with type (prior) μ and outside option x opts for submission in a period $t' \leq t$. Observe that,

$$\mathbf{S}_t(x, \theta) = \int \mathbb{P}(H_t(x, \mu)|\theta) dF(\mu).$$

We would like to show that that $\mathbf{S}_t(x, \theta)$ is increasing over time. Firstly, for the types of women with initial beliefs satisfying $U_i(\mu) < x$ and $U_s(\mu) < x$, exiting immediately is preferable. Hence $\mathbb{P}(H_t(x, \mu)|\theta) = 0$ for both $\theta \in \{A, N\}$ for all of these types μ. Also, for the types of women who begin submissive continue doing so for both husband types, $\mathbb{P}(H_t(x, \mu)|\theta) = 1$ for both $\theta \in \{A, N\}$. Finally, consider the set of types of women who begin independent $\mu \in [0, \mu^*]$.

We now argue that a positive measure of types begin submission in each period $t > 1$. If $\bar{p}_N = 0$ implying also that $\underline{p}_N = 0$, then there a positive measure of types in $[0, \mu^*]$ married to an aggressive husband receive no forms abuse for the first $t - 2$ periods but then experience physical IPV in period $t-1$. Such a woman will conclusively learn that her husband is aggressive and thus, because $u^* = U_s(1) = v - s > x$, the woman will become submissive. If $\bar{p}_N > 0$, then similarly for a positive measure of types in $[0, \mu^*]$, receiving both verbal and physical abuse in the first $t - 1$ periods of marriage yields continued independence, and receiving verbal and physical abuse once more induces submission; hence $\mathbb{P}(H_t(x, \mu)|A)) > 0$ for all t for a positive measure of types. Given that $\mathbf{M}_t(x, \theta)$ is nonincreasing over time for both $\theta \in \{A, N\}$, the desired conclusion follows. □

Proof of Proposition 2. Differentiating (3) in μ_τ verifies that it is sufficient to show $\mathbf{S}_t(x, A) > \mathbf{S}_t(x, N)$ and $\mathbf{M}_t(x, A) < \mathbf{M}_t(x, N)$ for $t > 1$. For $\mu < \mu^*$ and any history $h_t \in H_t(x, \mu)$ occurring with positive probability under $\theta = A$, the woman's period-t belief is $\mathbb{P}(A|h_t) = (1 + \frac{\mathbb{P}(h_t|N)}{\mathbb{P}(h_t|A)} \cdot \frac{1-\mu}{\mu})^{-1} > \mu$, implying that the history is more likely under $\theta = A$ than $\theta = N$. Thus, $\mathbb{P}(H_t(x, \mu)|A) \geq \mathbb{P}(H_t(x, \mu)|N)$, holding strictly with positive probability, implying $\mathbf{S}_t(x, A) > \mathbf{S}_t(x, N)$. $\mathbf{M}_t(x, A) < \mathbf{M}_t(x, N)$ can be demonstrated similarly. □

Proof of Corollary 1. Algebraic manipulation verifies that $\Delta_t(x)$ is increasing over the length of

the marriage if $\frac{\mathbf{S}_t(x,A)}{\mathbf{M}_t(x,A)} - \frac{\mathbf{S}_t(x,N)}{\mathbf{M}_t(x,N)}$ is itself increasing over the length of the marriage. If $\bar{q}_N = \bar{p}_N = 0$, then $S_t(x,N)$ and $M_t(x,N)$ are constant in marriage length. From the proof of Proposition 1, it must be that $\mathbf{S}_t(x,A)$ is strictly increasing and $\mathbf{M}_t(x,A)$ is non-increasing in t. □

Proof of Corollary 2. To show that the treatment effect vanishes for large outside options, we verify that submission rates vanish as the outside option becomes large for both treatment and control groups. The conclusion follows by noting that women with an outside option in the interval $x \in (u^*, \bar{x})$ never engage in submission but do remain married through period t in the positive probability event that they begin sufficiently optimistic about their husband's type to remain married at the outset of the marriage, $U_i(\mu) > x$, and do not experience abuse prior to t. □

Proof of Corollary 3. Condition (A) provides that a positive fraction of woman who experience no IPV while behaving independently in the first $t-1$ periods will experience sufficient verbal abuse to warrant submission in period t. From this, the proof follows the same structure as the proof of Proposition 2. □

Proof of Proposition 3. For a low outside option, we can partition women between those who begin marriage non-submissive, $\mu \leq \mu^*$, and those who begin submissive, $\mu > \mu^*$. Denote $1-\sigma = F(\mu^*)$ and $\sigma = 1 - F(\mu^*)$ the fraction of each type.

In early marriage (after one period of marriage), the measure is

$$\hat{\Delta}_2 = \frac{\lambda \cdot [\mu_\tau \bar{q}_A(1-\bar{p}_A) + (1-\mu_\tau)\bar{q}_N]}{(1-\sigma)\cdot \mu_\tau \bar{q}_A(1-\bar{p}_A) + (1-\mu_\tau)\bar{q}_N]} - \frac{\sigma}{\sigma + (1-\sigma)[\mu_\tau(1-\bar{q}_A)(1-\bar{p}_A) + (1-\mu_\tau)(1-\bar{q}_N)]} \tag{4}$$

$$= \frac{\lambda}{1-\sigma} - \frac{\sigma}{\sigma + (1-\sigma)[\mu_\tau(1-\bar{q}_A)(1-\bar{p}_A) + (1-\mu_\tau)(1-\bar{q}_N)]}, \tag{5}$$

where λ denotes the fraction of women who begin non-submissive, but turn to submission if they experience verbal abuse but no physical IPV in the first period. Denoting $\hat{\Delta}_\infty = \lim_{t\to\infty} \hat{\Delta}_t$,

$$\hat{\Delta}_\infty = \frac{(1-\sigma)[\mu_\tau \mathbb{P}(\text{submit before IPV}|A, \mu < \mu^*) + (1-\mu_\tau)\mathbb{P}(\text{submit}|N, \mu < \mu^*)]}{(1-\sigma)[\mu_\tau \mathbb{P}(\text{submit before IPV}|A, \mu < \mu^*) + 1 - \mu_\tau]} - 1 \tag{6}$$

Taking $\bar{q}_N \to 0$, note that $\lambda \to 1-\sigma$ since $\mathbb{P}(A|V_1 = 1, I_1 = 0, \mu) = (1 + \frac{\bar{q}_N}{\bar{q}_A} \cdot (1-\bar{p}_A) \cdot \frac{1-\mu}{\mu})^{-1} \to 1$ as $\bar{q}_N \to 0$ for all μ. Therefore, $\hat{\Delta}_2 > 0 \geq \hat{\Delta}_\infty$ for small enough $\bar{q}_N$. □

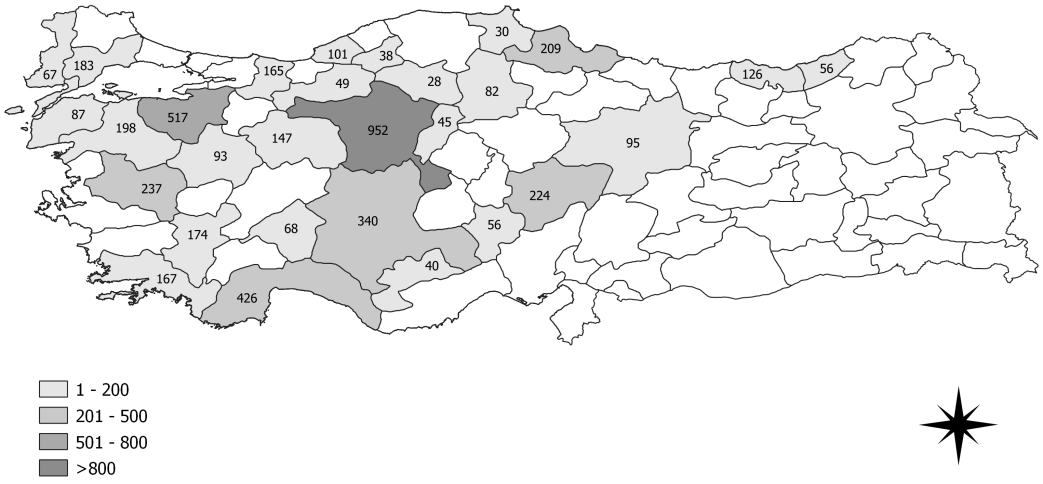
C Appendix: Sampling Design and Survey Procedures

The EXPOVIBE-Intimate Partner Violence (EXPOVIBE-IPV) and the EXPOVIBE-Conscript Veterans (EXPOVIBE-CV) surveys were conducted in 2019 as face-to-face interviews at randomly selected residential addresses in 29 provinces in western Turkey, outside of and with negligible in-migration from the conflict zone to separate exposure during military service from that of civilian experiences (Kibris, 2020). Figure A.3 shows the geographic distribution of the respondents in the two surveys.

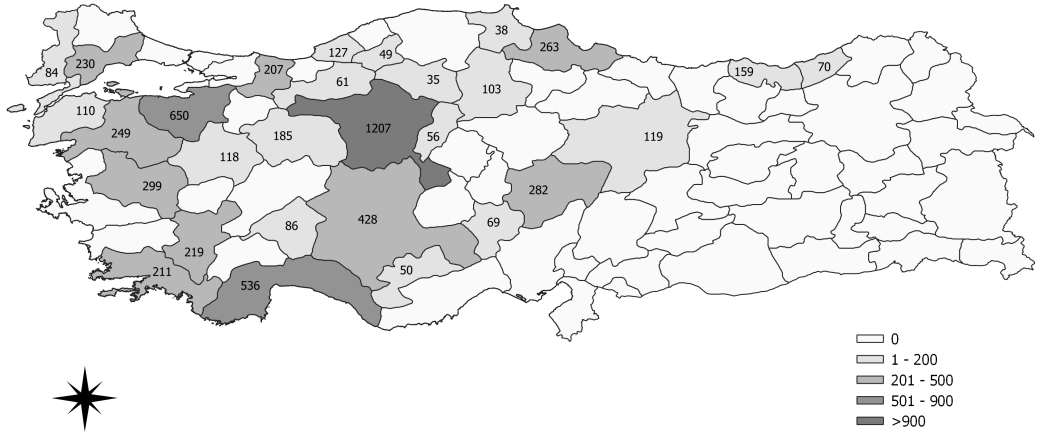
Turkey is administratively composed of 81 provinces, which, according to the Nomenclature of Territorial Units for Statistics (NUTS) classification developed by the European Union and adopted by the Turkish Insitute of statistics (TurkStat), constitute 26 NUTS2 regions. 19 of those regions are outside the conflict zone, however, 4 of them are composed of provinces with heavy in-migration from the conflict areas and therefore are not included in the EXPOVIBE surveys. From each of the remaining 15 regions, two provinces, that are, according to TurkStat definitions, representative of their regions, are included in the sampling frame (with the exception of the Ankara region as the region consists of only the province of Ankara itself). The sampling of both surveys mimics each other and was performed by the Turkish Statistical Institute (TurkStat). TurkStat maintains the national address-based electronic census registry system in Turkey. From this registry, which constitutes our sampling frame, residential addresses were randomly drawn in proportion to province populations to finalize the EXPOVIBE-CV and EXPOVIBE-IPV samples, respectively.

The EXPOVIBE-CV interviewed 5,024 draft veterans, all male by definition, in the summer and fall of 2019. The survey questionnaire was designed to collect information on a wide range of personal and family characteristics, attitudes, and behaviors, as well as military service details and experiences. At each randomly selected address, the eligible participant was the "man of the house" who completed his military duty sometime between 1984 and 2011. Those who were exempt or served an irregularly short period of time due to exceptional circumstances, such as health problems, were excluded. Interviews were conducted in Turkish by trained interviewers. Informed consent was obtained from all participants. A pilot study was conducted before embarking on the main field. The survey participation rate was 83%.

The fieldwork for EXPOVIBE-IPV was conducted in early 2019 with a representative sample of 6,384 married women. At each randomly selected address, the eligible participant was "the lady of the house" between the ages of 25 and 50, excluding those whose husbands were exempt or served an irregularly short period of time due to special circumstances such as health problems. The survey only interviewed married women because cohabitation is rare as it is highly stigmatized in the Turkish culture. The interview, however, did not specify any definition of



(a) EXPOVIBE-CV Survey



(b) EXPOVIBE-IPV Survey

Figure A.3: Geographic distribution of the respondents in EXPOVIBE-CV and EXPOVIBE-IPV surveys

being married and simply relied on the respondent's declaration of her marital status. Relatedly, participation was only constrained by women's age without any reference to husbands'

characteristics. The age restriction was introduced to maximize the likelihood of reaching out to women whose husbands were of draft age and therefore, were conscripted in the 1984-2011 period. According to national statistics on marriage by TurkStat, on average, women are 3 to 4 years younger than their husbands in our target populations. Therefore, the wives of those who served between 1984 and 2011 are expected to be between 25 and 50 years old considering that the age gap is larger among older cohorts and vice versa. Fieldwork was implemented in accordance with WHO recommendations on researching violence against women (World Health Organization, 2001). Interviews were conducted in Turkish by trained female interviewers. To guarantee the safety and well-being of participants, interviews were conducted one-on-one with respondents, and interviewers did not interact with anyone else from the same household. Informed consent was obtained from all participants. Collaborating with the Turkish Federation of Women's Associations (TKFD), support and counselling services were provided to all survey participants. A pilot study was conducted before embarking on the main field study. The survey participation rate was 79%.

In both surveys, interviewers were equipped to use a Kish grid in households with more than one eligible participant. However, the age and status restrictions coupled with the very high percentage of nuclear family households in the sampling provinces (according to 2019 census data by TurkStat, more than 90% of families in these provinces are nuclear) eliminated any such need.

Ethical approvals for the EXPOVIBE project were received from the European Research Council, the University of Warwick, and Sabanci University. The project also had an independent ethics advisory committee composed of expert scholars overseeing the study design and implementation at every step.

References

Adaman, F., Çarkoğlu, A., and Şenatalar, B. (2005). *Toplumun kamu yönetimine, kamu hizmetlerine ve reforma bakışı*. TESEV.

Adams, A., Huttunen, K., Nix, E., and Zhang, N. (2024). The dynamics of abusive relationships. *The Quarterly Journal of Economics*, page qjae022.

Agüero, J. M. and Frisancho, V. (2022). Measuring violence against women with experimental methods. *Economic Development and Cultural Change*, 70(4):1565–1590.

Aizer, A. (2010). The gender wage gap and domestic violence. *American Economic Review*, 100(4):1847–1859.

Alesina, A., Brioschi, B., and La Ferrara, E. (2021). Violence against women: a cross-cultural analysis for africa. *Economica*, 88(349):70–104.

Altınay, A. G. (2012). Askerlik yapmayana adam denmez: zorunlu askerlik, erkeklik ve vatandaşlık. In Sünbüloğlu, N. Y., editor, *Erkek Millet, Asker Millet: Türkiye'de Militarizm, Milliyetçilik, Erkek(lik)ler*, page insert page numbers if available. Iletişim Yayınları, Istanbul.

Anderberg, D., Mantovan, N., and Sauer, R. M. (2023). The dynamics of domestic violence: learning about the match. *The Economic Journal*, 133(656):2863–2898.

Anderberg, D., Rainer, H., Wadsworth, J., and Wilson, T. (2016). Unemployment and domestic violence: Theory and evidence. *Economic Journal*, 126(597):1947–1979.

Anderson, M. L. (2008). Multiple inference and gender differences in the effects of early intervention: A reevaluation of the abecedarian, perry preschool, and early training projects. *Journal of the American statistical Association*, 103(484):1481–1495.

Anderson, S. (2021). Intimate partner violence and female property rights. *Nature human behaviour*, 5(8):1021–1026.

Angelucci, M. (2008). Love on the rocks: Domestic violence and alcohol abuse in rural mexico. *Journal of Economic Analysis and Policy*, 8(1):1–46.

Asik, G. A. and Ozen, E. N. (2021). It takes a curfew: The effect of covid-19 on female homicides. *Economics Letters*, 200:109761.

Atkinson, M. P., Greenstein, T. N., and Lang, M. M. (2005). For women, breadwinning can be dangerous: Gendered resource theory and wife abuse. *Journal of marriage and family*, 67(5):1137–1148.

Bandura, A. (1973). *Aggression: A social learning analysis.* Prentice Hall.

Bermek, S., Matakos, K., and Unan, A. (2023). Victim-blaming social norms and violence against women: Correcting misperceptions or morality drive policy and behavior change? *Available at SSRN*.

Berniell, I. and Facchini, G. (2021). Covid-19 lockdown and domestic violence: Evidence from internet-search behavior in 11 countries. *European Economic Review*, 136:103775.

Bhalotra, S., Kambhampati, U., Rawlings, S., and Siddique, Z. (2021). Intimate partner violence: The influence of job opportunities for men and women. *The World Bank Economic Review*, 35(2):461–479.

Bloch, F. and Rao, V. (2002). Terror as a bargaining instrument: A case study of dowry violence in rural india. *American Economic Review*, 92(4):1029–1043.

Bobonis, G. J., Gonzalez-Brenes, M., and Castro, R. (2013). Public transfers and domestic violence: The roles of private information and spousal control. *American Economic Journal: Economic Policy*, 5(1):179–205.

Brassiolo, P. (2016). Domestic violence and divorce law: When divorce threats become credible. *Journal of Labor Economics*, 34(2):443–477.

Bulte, E. and Lensink, R. (2019). Women's empowerment and domestic abuse: Experimental evidence from vietnam. *European economic review*, 115:172–191.

Cesur, R. and Kibris, A. (2023). Subjecting the 'average joe' to war theatre triggers intimate partner violence. Technical report, National Bureau of Economic Research.

Cesur, R. and Sabia, J. J. (2016). When war comes home: The effect of combat service on domestic violence. *Review of Economics and Statistics*, 98(2):209–225.

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.

Collins, M. (2024). The intergenerational persistence of intimate partner violence. Working paper.

De, P. K. and Christian, A. (2020). Microfinance participation and intimate partner violence among women in bangladesh. *Oxford Economic Papers*, 72(2):435–452.

Deschamps, G. (2024). Motherhood and violence. *Job Market Paper, available at https://drive.google.com/file/d/1K6XHh_PpdOLtD5CjHqZ3EwWHlTZFZ8nu/view*.

Dildar, Y. (2021). Is economic empowerment a protective factor against intimate partner violence? evidence from turkey. *The European Journal of Development Research*, 33(6):1695–1728.

Duvvury, N., Callan, A., Carney, P., and Raghavendra, S. (2013). Intimate partner violence: Economic costs and implications for growth and development. *World Bank*.

Erten, B. and 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.

Esmer, Y. (1999). *Devrim, Evrim, Statüko: Türkiye'de Sosyal, Siyasal, Ekonomik Degerler*. Türkiye Ekonomik ve Sosyal Etüdler Vakfı.

Eswaran, M. and Malhotra, N. (2011). Domestic violence and women's autonomy in developing countries: Theory and evidence. *Canadian Journal of Economics*, 44(4):1222–1263.

Farmer, A. and Tiefenthaler, J. (1996). Domestic violence: The value of services as signals. *American Economic Review*, 86(2):274–279.

Field, E., Pande, R., Rigol, N., Schaner, S., and Troyer Moore, C. (2021). On her own account: How strengthening women's financial control impacts labor supply and gender norms. *American Economic Review*, 111(7):2342–2375.

Frezza, E. M. (2024). Accepting the unacceptable: Does intimate partner violence shape the tolerance of violence? Unpublished job market paper.

García-Moreno, C., Jansen, H. A., Ellsberg, M., Heise, L., Watts, C., et al. (2005). *WHO multi-country study on women's health and domestic violence against women*. World Health Organization.

García-Ramos, A. (2021). Divorce laws and intimate partner violence: Evidence from mexico. *Journal of Development Economics*, 150:102623.

Gibbons, A. M. and Rossi, M. A. (2022). Military conscription, sexist attitudes and intimate partner violence. *Economica*, 89(355):540–563.

González, L. and Rodríguez-Planas, N. (2020). Gender norms and intimate partner violence. *Journal of Economic Behavior & Organization*, 178:223–248.

Grossman, G., Manekin, D., and Miodownik, D. (2015). The political legacies of combat: Attitudes toward war and peace among israeli ex-combatants. *International Organization*, 69:981–1009.

Guarnieri, E. and Rainer, H. (2021). Colonialism and female empowerment: A two-sided legacy. *Journal of Development Economics*, 151:102666.

Haushofer, J., Ringdal, C., Shapiro, J., and Wang, X. Y. (2020). Spousal disagreement in reporting of intimate partner violence in kenya. In *AEA Papers and Proceedings*, volume 110, pages 620–624. American Economic Association 2014 Broadway, Suite 305, Nashville, TN 37203.

Haushofer, J., Ringdal, C., Shapiro, J. P., and Wang, X. Y. (2019). Income changes and intimate partner violence: Evidence from unconditional cash transfers in kenya. Technical report, National Bureau of Economic Research.

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. L. and Kotsadam, A. (2015). Cross-national and multilevel correlates of partner violence: an analysis of data from population-based surveys. *The Lancet Global Health*, 3(6):e332–e340.

Hidrobo, M., Peterman, A., and Heise, L. (2016). The effect of cash, vouchers, and food transfers on intimate partner violence: evidence from a randomized experiment in northern ecuador. *American Economic Journal: Applied Economics*, 8(3):284–303.

Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a new psychology of trauma*. Free Press, New York, NY.

Kibris, A. (2019). Expovibe-intimate partner violence dataset.

Kibris, A. (2020). Expovibe-survey with conscript veterans dataset.

Kibris, A. (2021). The geo-temporal evolution of violence in civil conflicts: A micro analysis of conflict diffusion on a new event data set. *Journal of Peace Research*, 58(5):885–899.

Kibris, A. and Cesur, R. (2024). Does war foster cooperation or parochialism? evidence from a natural experiment among turkish conscripts. Technical report, National Bureau of Economic Research.

Luca, D. L., Owens, E., and Sharma, G. (2015). Can alcohol prohibition reduce violence against women? *American Economic Review*, 105(5):625–629.

Luca, D. L., Owens, E., and Sharma, G. (2019). The effectiveness and effects of alcohol regulation: evidence from india. *IZA Journal of Development and Migration*, 9:1–26.

Ma, N., Chen, S., Kong, Y., Chen, Z., Geldsetzer, P., Zeng, H., Wu, L., Wehrmeister, F. C., Lu, C., Subramanian, S., et al. (2023). Prevalence and changes of intimate partner violence against women aged 15 to 49 years in 53 low-income and middle-income countries from 2000 to 2021: a secondary analysis of population-based surveys. *The Lancet Global Health*, 11(12):e1863–e1873.

Mater, N. (1999). *Mehmedin kitabı: Güneydoğu'da savaşmış askerler anlatıyor*. Metis Yayınları.

Mavisakalyan, A., Otrachshenko, V., and Popova, O. (2024). Natural disasters and acceptance of intimate partner violence: The global evidence. Technical report, IZA Discussion Papers.

Navajas, G. E., López Villalba, P. A., Rossi, M. A., and Vazquez, A. (2022). The long-term effect of military conscription on personality and beliefs. *The Review of Economics and Statistics*, 104(1):133–141.

Official Gazette, 1927 (12-17 July, 1927. No: 631-635). Official gazette of the republic of turkey.

Official Gazette, 1987 (14 July, 1987. No: 19517). Official gazette of the republic of turkey.

Official Gazette, 2011 (08 June, 2011. No: 27958). Official gazette of the republic of turkey.

Official Gazette, 2015 (12 November, 2015. No: 29530). Official gazette of the republic of turkey.

Official Gazette, 2019 (26 June, 2019. No: 30813). Official gazette of the republic of turkey.

Öztan, G. and B., B. E. (2015). Türkiye'de olağanüstü hal: Devlet aklı, askerler ve siviller. *Mülkiye Dergisi*, 39(1):159–186.

Robert, B. and Richerson, P. J. (1994). The evolution of norms:an anthropological view. *Journal of Institutional and Theoretical Economics*, 150(1):72–87.

Sanin, D. (2021). Do domestic violence laws protect women from domestic violence? evidence from rwanda. Working paper.

Sanin, D. (2023). Women's employment, husbands' economic self-interest and domestic violence. Working paper.

Stevenson, B. and Wolfers, J. (2006). Bargaining in the shadow of the law: Divorce laws and family distress. *Quarterly Journal of Economics*, 121(1):267–288.

Tauchen, H. V., Witte, A. D., and Long, S. K. (1991). Domestic violence: A nonrandom affair. *International Economic Review*, 32(2):491–511.

Tur-Prats, A. (2019). Family types and intimate partner violence: A historical perspective. *Review of Economics and Statistics*, 101(5):878–891.

Walker, L. (1979). *The Battered Women. Nueva York*. Harper and Row Publishers, Inc.

Waltermaurer, E. (2012). Public justification of intimate partner violence: A review of the literature. *Trauma, Violence, & Abuse*, 13(3):167–175.

WHO (2013). Global and regional estimates of violence against women. *WHO*.

WHO (2018). Violence against women prevalance estimates, 2018. *WHO*.

Yilmaz, O. (2018). Female autonomy, social norms and intimate partner violence against women in turkey. *The Journal of Development Studies*, 54(8):1321–1337.

Yüksel Kaptanoğlu, I., Çavlin, A., and Akadlı Ergöçmen, B. (2015). Türkiye'de kadına yönelik aile Içi Şiddet araştırması.