Essays on the Economic Consequences of Conflict:

Author: Sajala Pandey

ESSAYS ON THE ECONOMIC CONSEQUENCES OF CONFLICT

Sajala Pandey

A dissertation
submitted to the Faculty of
the department of Economics
in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

Boston College
Morrissey College of Arts and Sciences
Graduate School

April 2020

ESSAYS ON THE ECONOMIC CONSEQUENCES OF CONFLICT

Sajala Pandey

Advisors: Prof. S. Anukriti, Prof. Donald Cox, Prof. Anant Nyshadham

Abstract

This dissertation strives to understand the short and long-run consequences of armed conflict. In short-run, as conflict increases, parents are less likely to send their children to school or take them to health facilities and more likely to keep them home. Less time in school might translate to more time spent at work for these children. Coping with conflict can disrupt human capital accumulation of children and exposes them to adverse experiences, the effects of which can also last into adulthood. Some of the persistent effects of conflict on educational and health outcomes have been widely studied in the literature. Nevertheless, relatively less is known about how these childhood exposures affect adult behavior, beliefs, and attitudes. One of the goals of this dissertation is to study such long-lasting impacts of childhood exposure to conflict.

In the first chapter, *"Victims of Consequence: Evidence on Child Outcomes using Microdata from a Civil War"*, joint with Giri Subramaniam, we study the short-run impacts of violent events on child time allocation, curative health-care, and education. Exploiting the spatial and temporal variation in exposure to local-level armed conflict, we find that an increase in violent events: (i) leads to an increase in contemporaneous hours worked by children, with the effect being substantial for agricultural work; (ii) decreases the likelihood of parents taking their children to visit a health-care facility to seek curative care; and (iii) results in a reduced likelihood of attending school, along with a decline in years of education. Overall, the results indicate that war affected schooling and time allocation of boys whereas girls were less likely to get curative health-care.

The second chapter of this dissertation, *"Do Adverse Childhood Experience*

Shape Violent and Abusive Adult Behavior?", is motivated by the fact that family violence is pervasive and has detrimental economic consequences. Nevertheless, very little is known about how childhood experiences influence this behavior. In this study, I explore long-run determinants of family violence by linking exposure to adverse circumstances in childhood to the perpetration of abuse and neglect in adulthood. In particular, I examine the effects of men's exposure to the Nepalese Civil War (1996-2006) in childhood. Exploiting spatial and temporal variation in childhood exposure to the armed conflict from ages 0 to 16, I find that exposed men are less likely to perpetrate spousal violence and to display controlling behaviors. Additionally, children of exposed fathers are less likely to experience violent disciplining at home. They also work fewer hours per week and are less likely to be involved in dangerous working conditions.

In the third chapter, *"Exploring the Channels"*, I study the potential mechanisms that underlie the empirical results established by Chapter 2. I find that exposed men are more likely to complete secondary schooling, be employed at skilled non-agricultural occupations, and marry women who are more likely to have completed primary school and currently working. The most pertinent channel is that these men are less likely to justify wife-beating in different scenarios. Next, I assess the implications of the empirical results on the theories of domestic violence. Existing theories highlight two broader motives for perpetrating domestic violence: "Expressive" and "Instrumental". Violence is instrumental if it is used to extract resources from the victim whereas it is expressive if the perpetrator gains direct non- pecuniary (dis)utility from it. I find that my results resonate strongly with "Expressive" theories of domestic violence where men who were exposed to conflict in childhood find using violence at home distasteful.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACKNOWLEDGMENTS

This dissertation would not have been possible without the invaluable help, mentoring, and continued support from numerous people. I am incredibly thankful for those who supported me throughout this incredible journey.

I am forever grateful to my advisers, S. Anukriti, Donald Cox, and Anant Nyshadham for their constant guidance and advising. Thank you Prof. Anukriti for allowing me to audit your Development Economics class. Your course was the starting point of this dissertation. The countless meetings and advising sessions at your office, over Skype, and at Starbucks provided me with incredible support and bolstered my interest in research. I thank Prof. Cox for patiently listening to all my research ideas, and guiding me throughout this process. I am forever grateful for your constructive feedback on my research as well as my writing. To Prof. Nyshadham, I cannot describe in words how your insightful ideas and suggestions have shaped this project. You helped me regain faith in my project when I had almost given up on it. I thank everyone in the Department of Economics who offered me with sincere advice, and exceptional support during my six years at Boston College. A special thanks to Chandini Sankaran who has been a teaching mentor within the Department.

I would also like to thank my friends and colleagues, especially those from my cohort, who have been a big part of this incredible journey. They helped me survive comps and all aspects of a Ph.D. life. I also owe to my friends outside of academia who helped me with their constant encouragement.

To Giri, thank you for being an amazing partner, confidant, friend, and of

course, a co-author. Our Ph.D. journey has been amazing and I am very thankful that we were able to navigate it together. I am also thankful to my siblings, Nirjala and Nisrit, for their constant encouragement and unwavering support. Our Skype calls and trips provided me with the required sweet escape from the daily grind. Finally, my eternal gratitude goes to my parents for their unconditional love. Whatever success I have achieved so far, I owe it to them.

CHAPTER 1
VICTIMS OF CONSEQUENCE: EVIDENCE ON CHILD OUTCOMES USING MICRODATA FROM A CIVIL WAR

[WITH GIRIDARAN SUBRAMANIAM]

1.1 Introduction

Exposure to an armed conflict has detrimental effects on infants and children. Existing literature in economics has documented the negative effects of violent events on child health (Akresh et al., 2012b), child birthweight (Mansour and Rees, 2012), height and cognitive skills (Duque, 2016), and long-run educational achievements (Akresh, 2008). However, most studies seek to estimate the causal effects of violent conflict either on the long-run educational outcomes or short-run health outcomes like height and weight. Still, relatively little is known about how short-run child time-allocation decisions, schooling outcomes, and contemporaneous health-seeking behaviors are distorted due to persistent violence.

In this chapter, we study the causal effects of violence on child time allocation, curative health care, and education. In particular, we examine how periods of heightened conflict during the Nepalese Civil War (1996-2206) affect contemporaneous child labor and health care utilization decisions along with short-run educational outcomes. As violence increases, parents are less likely to send their children to school or take them to health facilities and more likely to keep them home. Less time in school might translate to more time spent at work (paid or unpaid) for these children. Coping with violence, therefore, disrupts education and curative health care of young children which can be potentially damaging to their later-life outcomes.

Additionally, armed conflicts can have differential impacts on boys and girls. Shemyakina (2011) finds that girls (but not boys) who were exposed to Tajik armed conflict were less likely to complete mandatory schooling. Likewise, Chamarbagwala and Morán (2011) find that Guatemala's 36-year-long civil war affected the long-run education outcomes of Mayan females more adversely than males. However, evidence on the gender disparity in the effects of armed conflict is mixed. Akresh (2008) finds strong negative effects of the Rwandan genocide on the completed education of boys. In terms of health outcomes, Akresh et al. (2012b) find that both boys and girls who were born during the 1998–2000 Eritrea–Ethiopia experienced similar negative impacts on height-for-age Z-scores. There is also evidence of how conflict affects children of certain age groups more than the others, even though the research on this dimension remains limited. In two separate studies, Shemyakina (2011) (for Tajik conflict) and Rodriguez and Sanchez (2012) (for Colombian conflict) find that violent events affected schooling outcomes of children aged 12 and older.

The salient horrors of violence are obvious and anecdotal evidence on them is widely available. However, the causal effect of armed-conflict on contemporaneous outcomes of children is difficult to measure as data and information arrive haphazardly. The reason being that violent events prevent survey takers from doing their jobs. In this situation of an "informational black hole", the Nepalese Civil War (1996-2006) provides an excellent setting to examine the research questions. Firstly, this armed conflict did not deter ongoing surveys, hence, allowing us to examine contemporaneous outcomes. Secondly, the nature of the war itself, where different parts of the country experienced a varying level of violent events overtime, provides us with the required geographical and temporal variation to address our questions. The prolonged armed conflict between the Maoist and the government of Nepal initially began in the Western part of the country as

a small-scale anti-government protests. However, over time the conflict engulfed the entire country killing more than 13,000 people.

Our data on armed conflict comes from a unique database of victims from the civil war which includes the date and the location of every war-related event. We then merge this data with a nationally representative household survey to access information on contemporaneous child-level outcomes during the conflict. For identification, we exploit the spatial and temporal variation in exposure to violence at local administrative levels.[1] This gives us a setting for a quasi-natural experiment to answer our research question.

We show that an increase in conflict-related violent events in the past 30 days increases the total hours worked by children aged 5 to 16. A one standard deviation increase in exposure to conflict in a given month increases total hours worked by 4% of the sample mean. The estimated effects are especially substantial for the time allocated to agricultural work: a one standard deviation in violence exposure increases hours worked in agriculture by roughly 8% of the sample mean. The impact of violence on time allocated to work is largely driven by the younger cohort (age 5-11) and boys.

As for health-seeking behavior, we find that violence does not make people sicker but reduces the probability of visiting a health care facility for children less than 16 years of age. This effect is non-negligible: a one standard deviation increase in violent events in the past 30 days, decreases the likelihood of taking a child to a health facility by roughly 6% of the sample mean. Unlike the negative impact of conflict on time-allocation, the drop in curative care-seeking behavior is driven by girls. The potential connection between child's (labor) productivity and sound health can be a reason why we do not observe a decrease in curative care for boys. Next, we focus on the educational outcomes of children during the war.

[1]Local administrative levels include Village Development (VDCs) and Municipalities which are the second-lowest administrative units in Nepal.

Exposure to violent events reduces the likelihood of currently attending school and decreases years of education, in the short-run, by approximately 1.5 months. The negative impact of violence on educational achievements is significant for boys.

One of the potential mechanisms driving our contemporaneous outcomes is that an increase in violent events changes parents' perception of risk, hence, altering their decisions related to children. This causal channel aligns with the theoretical model provided by Estevan and Baland (2007). Their model shows that when there is an increase in child mortality risk and parents are not very altruistic, child labor increases whereas schooling decreases. An increase in mortality risk hinders parents from truly internalizing the impact of child labor on their children's welfare. Therefore, they prefer immediate transfers from their children in the form of child labor rather than risky investments like education. The need for immediate transfer can also explain why violent events negatively impact boys than girls. A larger portion of a child's time allocation is on a physically strenuous and arduous task like agricultural work where the returns might be higher from boys. On health-seeking behavior, our findings echo the results from Molina (2016). She finds that local violence in the Philippines reduced curative care utilization for children by their parents due to avoidance behavior. Violence increases the risk of being victimized which then translates to higher non-monetary costs of seeking health care.

Related Literature and Contribution

This study is closely related to the literature in economics that studies the effect of violence on child-level outcomes. Our findings relate well with those of Akresh (2008) and Shemyakina (2011) who find negative effects of genocide and armed conflict on educational achievements in Rwanda and Tajikistan, respectively. We add to this literature by studying the contemporaneous effect of violence on child

time allocation and health-seeking behavior along with schooling outcomes. As per our knowledge, Rodriguez and Sanchez (2012) and Di Maio and Nandi (2013) are the only other two studies analyzing the effect of conflict on child-labor. Valente (2013) studies the causal effect of conflict on education in Nepal but relies on district-level analysis. During the time of conflict, Nepal had 75 districts and 3,915 villages within those districts. We, on the other hand, exploit temporal variation in conflict across these villages around the date of the survey and identify the effects of local-level violence.

The second strand of literature this paper contributes to is the studies on the relationship between violence and risk. Some experimental studies document that exposure to violence can change one's risk preferences (Brown et al., 2017; Callen et al., 2014; Voors et al., 2012). Households also adjust their production, savings and labor supply decisions as a response to income risk caused by an increase in violence (Bundervoet et al., 2006; Fernández et al., 2011). We add to this literature by providing suggestive evidence for risk associated with fear of victimization and mortality in the context of Nepal's civil war.

The rest of the chapter is organized as follows. In Section 1.2, we elaborate on the Nepalese Civil War. In Section 1.3 we discuss the main data sources that we use in the chapter. Section 1.5 lays out the empirical strategy. Section 1.6 presents results for the effect of violence on child time use, education, and health-seeking behavior. Section 1.7 discusses potential channels and Section 1.8 concludes.

1.2 Background

The Nepalese Civil War

On February 13, 1996, the Communist Party of Nepal (Maoist) (CPN-M) formally launched a rebellion against the government termed as the "People's War". This

resulted in a prolonged armed conflict between the CPN-M forces and the government of Nepal that lasted until the Comprehensive Peace Accord was signed in 2006. During this period over 13,000 people were killed and about 1,300 went missing (UN, 2012).[2]

Historically, Nepal was governed as an absolute monarchy. During the early 1990s, Nepal transitioned to a constitutional monarchy, following a pro-democracy movement – the *Jana Andolan* ("People's Movement") – that witnessed the unification of various political parties towards the establishment of a constitutional framework. The "People's Movement" led to the establishment of multiparty democracy and voting rights, and in November 1990, the new constitution was drafted. This raised expectations of social progress, and some historians believe that this was one of the factors that contributed to the onset of internal conflict in 1996.

Shortly before the formal announcement of the "People's War", the CPN-M submitted a 40-point demand to the Nepali Government that covered many socioeconomic and political issues, and warned of a militant struggle that would follow if those demands were not met. Over the course of the next ten years, acts of violence and destruction, human rights abuses, and mass killings by both, government forces and the CPN-M forces, were committed across Nepal's 75 districts.[3] Appendix 1.A shows the general time-line of key events during this civil war.

The CPN-M militia served under the leadership of a Chairman, who was also the Supreme Commander of the People's Liberation Army (PLA), which was

[2]Different sources provide different estimates for this figure. The government claims that a total of 12,686 individuals were killed; although, since the State was actively involved in killings during this period, the government has an incentive to under-report. While the National Geographic Magazine also reports a similar figure as the government's (Bendiksen and Douglas, 2005), we identify 13,247 killings from our microdata.

[3]With the exception of two districts – Manang and Mustang – all other districts witnessed conflict-related killings. Manang and Mustangs districts are both high-altitude trans-Himalayan regions and very sparsely populated.

formed in September 2001. According to a UN (2012) report, the Maoist militia had between 5,000 to 10,000 active combatants throughout the period of conflict and towards the end had expanded to multiple divisions across the country that was organized under three commands that were under the authority of the Supreme Commands and four Deputy Commanders. The PLA's playbook included guerrilla attacks, and sabotage and propaganda actions, such as random destruction and seizure of property (Shrestha, 1997). The hilly terrains of Nepal allowed the PLA to easily carry out guerrilla type warfare. Rural areas were more likely to be affected, at least during the initial phases of the war.

Apart from the CPN-M militia, the government's forces were also actively involved during the conflict period to fight against the PLA. Initially, since the conflict was seen as a minor threat, the Nepal Police (NP) was mobilized in order to contain the insurgency. In 2001, the Armed Police Force of Nepal, a paramilitary force, was set up in order to fight the insurgents due to the growing power of the Maoist forces. The Royal Nepalese Army (RNA) was not deployed by the government until late 2001 citing that the insurgency was a law and order problem that was to be addressed by the Nepal Police. Although the government's forces were to combat the insurgents, numerous acts of violence and unlawful killings were committed as a result of collateral damage and chance encounters (UN, 2012). In particular the targets included those who were alleged informants or perceived as sympathizers for a particular side. Our microdata covers victims of violence from both sides of the conflict.

1.3 Data

Our data primarily comes from three independent sources: (i) the Informal Sector Service Center (INSEC) microdata on victims from conflict, (ii) the Nepal Living Standards Survey, and (iii) the National Population Census.

1.3.1 Microdata on Civil War

The data on victims from the Nepalese Civil War was collected by the Informal Sector Service Center (INSEC), a non-governmental organization based in Nepal that works on human rights issues.[4] This data was compiled from qualitative records from investigations of international human rights violations and international humanitarian law violations during the ten-year insurgency and are cross-referenced in the United Nations Human Rights Office of the High Commissioner's Nepal Conflict Archive.[5] The data maintained by INSEC has been used in previous studies, like those by Do and Iyer (2010)[6] and Shrestha (2017), and is, as per our knowledge, the most reliable and impartial database on conflict intensity during the civil war. It is also unique in nature since it is a census of a known population of victims from the war. The unit of observation is an individual victim. The data also provides information on whether the victim was killed, injured, or disappeared along with information on the location and the exact date of the violent event.

The INSEC data reports 14,959 fatalities, of which 13,247 were killings, 932 were disappearances, and 780 were instances when the victim sustained disability inducing injuries.[7] By construction the data excludes acts of violence where people were not killed or injured, or did not disappear. For instance, if a building was torched and nobody was affected, our data would not record such an incident. To this extent, our data includes only victimization from conflict and not a broader set of threat to property and life due to conflict. Due to the rich

[4]This database is unique in that it is a census of victims from domestic conflict and is compiled by an impartial entity–Informal Sector Service Center (INSEC). This is important since both the Nepali government and the Maoist forces were actively involved in killings and acts of violence throughout this period. It is only reasonable to suspect that if the government were to build a similar database, it would necessarily try to underplay its role in the civil war.

[5]http://nepalconflictreport.ohchr.org

[6]I use geographically granular data on conflict than this study.

[7]Authors' calculation.

temporal and spatial information in the data, we are able exploit variation along these dimensions in order to identify the effect of risk due to violence on economic decisions.

Figures 1.1 depicts the three major outcomes of violent events (killed, disappeared, or injured). More than half the number of deaths were caused by the government's forces. Figure 1.2(a) summarizes the distribution of deaths throughout the conflict by the perpetrator (State, Maoist, and Others). This data also captures the delayed involvement of the Nepali government's forces in the civil war. Specifically, after 2001, once the army was deployed, the number of deaths due to the State were strikingly higher than those caused by the Maoists. Figure 1.2(b) depicts the causes of these deaths as recorded in the INSEC database. Out of all the deaths that occurred during this war, 30% were due to combat fighting whereas the remaining of the victims died in a non-combat setting. The majority of the deaths in the non-combat setting was due to extra-judicial killing perpetrated by the state.

Spatial and Temporal Variation in Conflict

Figure 1.3 shows district-level spatial and temporal variation in conflict-related events from the start of this war to its end. Violent events first started in districts like Rukum and Rolpa and slowly started spreading in neighboring districts with varying and greater intensity (as it goes from lighter to darker shades). Here, for each individual map, we define intensity as conflict-related events (deaths, killing or disappearances) per 1000 population within a district for the given time frame. Although this district-level breakdown of conflict intensity provides information on the geographical spread of conflict across time, our analysis actually uses Village Development Committees (VDCs) and municipality level analysis. VDCs and municipalities are the second-lowest administrative units and collections of these VDCs and few municipalities make up a district. Focusing on smaller ad-

ministrative units allows conflict to be local enough to influence decision making. Figure 1.B.1 in Appendix 1.B shows all the villages marked in red for which some kind of conflict-related event has been recorded in the INSEC data. Out of 3915 Village Development Committees (VDCs) and municipalities[8], the conflict data records some violent events for 2427 of them. This spatial and temporal variation in conflict across local level administrative units is what we intend to exploit in this paper.

In order to illustrate the variation in conflict intensity across time and space, we plot the standard deviation of the number of violent events per thousand population across time and space (district level). Figure 1.4 plots the cross-sectional standard deviation for all districts across time (1996-2006) and Figure 1.5 plots the standard deviation for each district across time. As can be seen in Figure 1.4, with reference to the time-line of events in Appendix 1.A, the period immediately after the army was employed in November 2001 until the second round of peace talks began in January 2003, witnessed an increased number of killings across the country. There were however regions that witnessed relatively low levels of violence even during the peak of the war. Taken together, these two figures show the variation that we exploit in order to identify he causal effects of violence on household decisions on issues related to children.[9]

1.3.2 Nepal Living Standards Survey

To study the impact of violence on the household's economic decisions such as education, labor and time allocation, and health care of children, we use data from the Living Standards Measurement Study (LSMS), otherwise known as the Nepal Living Standards Survey (NLSS). This is a multi-topic representative household

[8]VDCs (rural) and municipalities (urban)are the second-lowest administrative units in Nepal. Collection of VDCs and municipalities make up a district

[9]While doing so we are obviously restricted by the time-line of other surveys and the nature of questions in those surveys.

survey conducted by the Central Bureau of Statistics (CBS) and is available for the periods of 1995-96, 2003-04, and 2010-11. The survey is a cross-section that covers a broad range of household-level topics including consumption, income, labor markets, education, and health. Our outcome variables and bulk of control variables are taken from the NLSS, 2003-04 as the time of the survey falls within the conflict period allowing us to assess contemporaneous decision making during the time of armed conflict.

1.3.3 Population Census of Nepal

To weight our victim-level data by village-level population, we use the National Population Census of 2001. In order to distinguish between densely populated villages with a lot of violent events and sparsely populated regions with few deaths, our weighting technique is crucial in understanding the differential effect of conflict intensity across time and space.

1.4 Summary Statistics

Table 1.1 reports summary statistics on our variables of interest and controls. Panel A of the table provides the descriptive statistics for children's time spent in work each week. On average, children of ages between 5 to 16 worked for 10.8 hours per week. This involves working in wage/non-wage market activities within or outside the household, agricultural work, or domestic chores. The variation in total hours worked is also high at 17.6 hours per week. A larger amount of time is allocated to agricultural work where children spent an average of 6.3 hours per week. The NLSS also provides information on how many hours these children worked in a year. The mean hours worked in activities outside schooling per year is equal to 426.3 hours.

Though the decision to obtain an education is a dynamic process, the NLSS has information on only final education outcomes observed at the time of the survey. Unlike time allocation in other activities, this survey does not report the number of hours dedicated to schooling per week. For education, we focus on ages 6 and above as Nepal's Education Act of 1971 [10] suggested the minimum age for primary school enrollment to be 6 years. Panel B of Table 1.1 reports the mean and standard deviation of educational outcomes of children aged 6 to 16 during the time of the survey. 80 percent of children reported having been ever enrolled and currently attending school. A large number of children are not in appropriate grade for their age. On average, 70 percent of current school-going children are over-age for the grades they are attending. Finally, the mean number of years of education for this age group is at 5.2 years.

Panel C of 1.1 reports summary statistics on health-seeking behavior for children of ages between 0 to 16. Only 8 percent of the children were taken to health services in the past 30 days to seek any curative health care. Fifty percent of children are female and eighty percent of them are from rural locations. The average number of years of education of household head is 3.9 years whereas that of the mother is of 1.8 years only.

1.5 Empirical Strategy

1.5.1 Specification

Since we are interested in contemporaneous and short-run outcomes, we exploit conflict around the date of the NLSS survey for each individual. We estimate the following specification: for outcome y_{ivt} of child i, living in village/municipality

[10]The first amendment of this Act was in July 2003. However, NLSS survey had already begun by then and the school year had already started for the amendment to have an immediate impact.

v and surveyed at date t[11], we have

$$y_{ivt} = \beta_0 + \beta_1 Intensity_{ivt} + \mathbf{X'_{iv}\Gamma} + \delta_m + \delta_y + \alpha_{ps} + \varepsilon_{ivt} \tag{1.1}$$

where $Intensity_{ivt}$ is a measure of conflict intensity that child i was exposed to in village v up to the date of the survey t. The construction of conflict intensity is outcome variable specific. For contemporaneous outcomes like time allocation and curative health care seeking, our goal is to understand if local-level conflict around the time of the survey has any causal impact. In this case, $Intensity_{ivt}$ is calculated as the total number of conflict-related events in the past 30 days up to the date of the survey per 1000 population in a village or a municipality. As mentioned earlier, unlike time allocation outcomes, the NLSS provides information only on the final educational outcomes of the children reported at the time of the survey. Therefore, for impacts on short-run educational outcomes, $Intensity_{ivt}$ is measured as the sum of the total number of violent events per 1000 population a child was exposed to since her birth (if born after 1996) or after the start of the civil war in 1996 (for those born before 1996) up to the date of the survey.

The NLSS survey spans over a period of more than one year. However, there is a limited variation in the date of survey of households within the same village or municipality and inclusion of local level fixed effects will drive away all the variation that we intend to exploit. Therefore, we include district-specific stratum fixed effects denoted by α_{ps}. District is a larger administrative area which includes several villages and municipalities. At the time of the survey, Nepal had 75 districts and 3,915 villages or municipalities within those districts. Stratum here takes care of the ecological and topographical division of villages and municipalities. X_{iv} are a set of individual, household and village level controls such as the age of the child, gender, mother's education, household head's education,

[11]Date includes day d, of month m of year y

household size, household wealth, village-level population, and total time taken to primary school or nearest health facility. We also control for ethnicity fixed effects. δ_m and δ_y are month and year of survey fixed effects. The coefficient of interest, β_1, measures the effect of a unit increase in conflict exposure on the outcome variable of interest. ϵ_{ivt} is the error term of the regression model. Finally, we estimate all regressions using Ordinary Least Squares (OLS) and cluster standard errors at the village or municipality level.

1.6 Results

1.6.1 Child Time Allocation and Labor

When the number of violent events in a locality increases, parents might decide to keep their children home and involve them in household work or other activities like agriculture. Spending more time in economic work or domestic chores by children due to ongoing conflict translates to a reduction in time allocated to studying or leisure.

Our source for the time use data is the NLSS-2003 survey which records hours per week or per year dedicated by children (aged 5-16) to various activities outside schooling. This allows us to analyze if local-level conflict in the past 30 days or 12 months from the date of the survey (for the latter measure of time use) had any contemporaneous effect on a child's time allocation and labor supply. *Our measure of conflict intensity ($Intensity_{ivt}$) variable as shown in equation 1.1 is calculated as the total number of conflict-related events in the past 30 days (or 12 months) up to the date of survey per 1000 population in a village or a municipality.* The first two rows of Table 1.2 present summary statistics for our measure of conflict intensity used to analyze impacts on time allocation. The mean of conflict intensity in the past 30 days and is 0.02 with a standard deviation of

0.1 whereas the average conflict intensity in the past 12 months is 0.2 with a standard deviation of 0.6.

Table 1.3 reports the coefficient estimates from equation 1.1 for time use of children in past 7 days. Column 1 of Panel A shows the results for the entire sample of children aged 5-16. We find that a one standard deviation increase in conflict intensity in the past 30 days, which is 0.1 (Table 1.2), increases total hours worked in a week by $4.205 \times 0.1 = 0.4205$ hours which is roughly 4% of the sample mean. This effect is significant and largely driven by an increase of approximately 7.4% of the sample mean in the total hours worked by younger children aged 5 to 11 (Column 2 of Panel A). Panels B and C of Columns 1 and 2 present results for effects on total hours worked for female and male samples, respectively. The increase in total hours for all children aged 5 to 16 is driven by an increase in working hours of boys belonging to both younger (age 5 to 11) and older (age 12 to 16) age-cohorts. For girls, there is a significant increase in total hours worked only for the younger cohort.

Columns 4 to 6 of Table 1.3 present the results for the contemporaneous effect of exposure to violence on time allocated to agricultural work. A standard deviation increase in conflict intensity in the past month increases time dedicated to agriculture for children of ages 5 to 16 by $5.340 * 0.1 = 0.534$ hours which is roughly 8.4% of the sample mean. The magnitude of the effect on time dedicated to agriculture is larger for the younger cohort (approximately 15% of the sample mean). As seen in Columns 4-6 of Panel C, these results are driven by an increase in the time allocated by boys belonging to both younger and older cohorts. Whereas for girls (Columns 4-6 of Panel B) a significant increase in agricultural work due to recent violence is observed only for the younger cohort of ages 5 to 11. The coefficients hours spent in domestic activities are negative but very small in magnitude with no statistical significance. [12]

[12]Table 1.C.1 reports estimates for 1.1 when the outcome variable is hours worked in past

1.6.2 Health

Curative Health Seeking Behavior

Our next goal is to understand if conflict-related events in the past 30 days affect parents' decision to seek any health care for their children less than 16 years of age. We focus on health-seeking behavior because a lack of proper health care, especially in developing countries, can be detrimental to children, the effect of which can last into adulthood. Access to proper health care can also improve school attendance and performance. Additionally, a larger portion of a child's time allocation is on arduous agricultural work, collecting water or firewood. In this case, parents might have a greater incentive to seeking curative health care of children to improve their productivity in physically strenuous activities.

Table 1.4 presents estimates for equation 1.1 where the outcome variable is a dummy that takes value 1 if the survey respondent reported that any health care was sought for the child in past 30 days. As seen in Column 1 of Panel A, conflict intensity is negatively associated with health care. A one standard deviation increase in conflict in the past 30 days, decreases the likelihood of taking a child of age between 0-16 to a health facility by $-0.052 \times 0.1 = 0.0052$ points which is 6.11 % of the sample mean. This drop is significant and negative for children of age cohort 5 to 16 by $-0.034 \times 0.1 = 0.0034$ points which is roughly 6.3% of the sample mean. The drop in the probability of seeking curative care is driven by the negative impact of recent conflict on health-seeking for female children as observed in Panel B. A standard deviation increase in conflict intensity

12 months. *For this estimation, our measure of conflict intensity ($Intensity_{ivt}$) is the total number of violent events per thousand population in a village or a municipality in the past 12 months of the date of the survey.* An increase in conflict intensity does not have a significant impact on total hours worked. The only exception is the older male cohort for which the effect is significant and positive. However, we do find a significant effect on hours worked in agricultural work. A one standard deviation increase in conflict in the past 12 months, which is 0.6 (Table 1.2) increases yearly time allocated to agricultural work by $56.329 \times 0.6 = 33.8$ hours which is roughly 14.4% of the mean. This impact is significant (in comparison to the sample mean) for both boys and girls belonging to the younger cohort.

reduces the probability of going to a health facility for girls $-0.080 \times 0.1 = 0.0080$ points which is roughly 16% of the sample mean. Girls of age group 5 to 11 are also significantly impacted by recent violence. We do not find evidence for any significant effect of conflict on curative health care seeking of boys.

The NLSS survey records the answer to whether a child was taken to a health facility if only she was reported to be ill in the past 30 days. Following Molina (2016), we assigned a zero to those children who were not reported to be sick while creating the outcome variable in Table 1.4. This is consistent with this variable being an indicator of curative care-seeking and not health-care utilization after being sick. To check if conflict affects sick children differently, we run the estimation only for sick children. The results of this estimation are presented in Table 1.5. Before we describe the results in detail, we limit this analysis to sick children belonging to ages 16 or below. Conducting sub-sample analysis of different age cohorts reduces our sample size by a lot resulting in issues with the power of the test.

As seen in Column 1 of Table 1.5, an increase in conflict in the past 30 days negatively impacts curative health care seeking but we fail to find any statistical significance. However, when we analyze female and male samples separately, we find a negative association of conflict with curative health care seeking for sick girls. A standard deviation increase in conflict intensity decreases the probability of being taken to health facility for sick girls by $-0.863 \times 0.1 = 0.0863$ or 8.63 percentage points. This decrease in the probability is roughly 13.4% of the sample mean. The result for sick boys is, however, the complete opposite. As conflict increases by one standard deviation, curative health care seeking for male children increases by 0.0493 or 4.93 percentage points, which is 7% of the sample mean. Parents prefer to take sick boys to health facilities during times of conflict because these periods are also marked by an increase in their labor supply. The potential

connection between a child's productivity and sound health might be a motivating factor for this increase in the likelihood of health care utilization for sick male children.

Does conflict make children sick?

However, the effect of conflict can be two-fold: 1) as discussed above, it can prevent parents' from seeking health-care for their children, which in turn might deteriorate their health, 2) conflict can itself make children sicker. Therefore, to understand the effect of violence on health-seeking behavior, it is crucial to know if conflict itself is making children sicker. NLSS survey asks respondents questions on the exact date of when they last fell sick and for each village, we have information on the number of conflict-related events for each day from 1996-2006. Using this information we create an artificial unbalanced village-level panel. To do this, for each reported date of sickness, we sum up all respondents of the same village who fell sick on that particular day. We then estimate the following panel regression:

$$S_{jt} = \beta_1 + \beta_2 Intensity_{jt} + \delta_j + \alpha_t + \epsilon_{jt} \tag{1.2}$$

,where S_{jt} is the number of children (age 0-16) in a village j who reported being sick on date t. $Intensity_{jt}$ is is a measure of conflict intensity calculated by adding the total number of conflict-related events in the past 30 days up to the date of reported illness weighted by the population of the village times 1000. We also include village and date of illness fixed effects, δ_j and α_t, respectively and cluster the standard errors are at the village level.

Table 1.6 shows the results for the panel estimation as seen in equation 1.2. Conflict intensity in the past 30 days of the date of reported illness has no significant effect on the number of children reported being sick. The statistical insignificance of the coefficient estimates remains when we run the specification

for boys and girls separately. Therefore, conflict does not make children sick, rather the channel it operates by is affecting healthcare-seeking behavior.

1.6.3 Education

An increase in hours worked on other activities immediately after a period of violent conflict raises the question of whether this leads to a decrease in the time allocated to schooling. Unfortunately, the NLSS does not have any information on hours spent in schooling but only on final educational outcomes observed at the time of the survey. *As a result of which, we summed up the total number of violent events a child was exposed to since her birth (if born after 1996) or after the start of the civil war in 1996 (for those born before 1996) up to the date of the survey to calculate the number of violent events per thousand population (conflict intensity,* $Intensity_{ivdmy}$*).* The summary statistics for this measure of conflict intensity can be found in the third row of Table 1.2. On average, children were exposed to 0.6 violent events per thousand population with a standard deviation of 2.3. The maximum exposure is at 41.8 events per 1000 population.

As mentioned earlier, the minimum age for primary schooling in 2003 was 6 years old. Therefore, the only cohort born after the civil war that we can include in our analysis is those who were born in the year 1997. Since, children aged 7-16 at the time of the survey were born in 1996 or before, there is very little variation in conflict intensity across birth year cohorts within the same village. Therefore, we follow our baseline specification of equation 1.1 to include only year and month of the survey, and stratum varying district fixed effects.

Enrollment

Violent events due to armed conflict would have affected parents' decisions to enroll their children in primary schools. The age group whose enrollment was affected by the war includes children who were of 6 years or below in 1996 (13

years and below in 2003) or those who were born after 1996. We do not observe these children after 2003 and hence do not know their long term school enrollment outcome. However, we can assess whether exposure to conflict impacted their likelihood of ever being enrolled in primary school. This effect on enrollment can be considered as the short-run effects of conflict. Because the official age to start primary school was 6 years in Nepal, we study the effect of conflict in the probability of ever being enrolled during the wartime of students aged 6 to 13 in 2003. Column 1 of Table 3.1 presents results for this estimation. The outcome variable takes value 1 if a child was ever enrolled in school. Though the sign of the coefficient on Panel A of Column 1 is negative, it is very small in magnitude and we fail to find any significant effect on enrollment.

Currently Attending

The enrollment variable above does not tell us whether the child was out of school at the time of the survey or had to drop out. A child might have been enrolled in school at some point in time but might not be currently attending due to a violent situation. Columns 2-5 of Table 3.1 present estimates for an outcome variable "Currently Attending" which takes value 1 if a child is reported to be attending school at the time of the survey. Panel A of column 1 shows that exposure to the conflict has a negative and significant effect on the probability of currently attending school for children who are of ages 6 to 16. However, the magnitude of this effect on education is smaller compared to the effects on labor hours. A one standard deviation increase in conflict intensity, which is 2.3 (Table 1.2), leads to a decrease in the likelihood of currently attending school by $0.005 \times 2.3 = 0.0115$ or 1.15 percentage points - approximately 1.45 percent of the sample mean. For a highly exposed child (conflict intensity of 41.8), this drop is nearly 27% of the sample mean. This result is largely driven by the older cohort of ages 12 to 16, as seen in Column 4 of Panel A.

Columns 2-4 of Panel C present results for this estimation for boys. As observed in Column 2, the drop in the likelihood of currently attending school due to being exposed to conflict is negative and highly significant for boys. A standard deviation increase in conflict decreases this probability by $0.006 \times 2.3 = 0.0138$ or 1.38 percentage points, which is nearly 1.67% of the sample mean. We observe a significant drop in the likelihood of attending school for both younger (age 6 to 11) and older (age 12 to 16) boys. This result is in line with the effect of conflict on child time allocation and labor hours worked (Section 1.6.1) where results were largely driven by an increase in hours worked by male children.

Over-age

Conflict increases the likelihood of delay enrollment in primary school, absenteeism in school, missed exams, and closure of schools leading to grade repetition. Even though we do not have direct measures for these variables, we can study whether conflict affects the probability of students being in the appropriate grade for their age. We limit our sample to students who are of 6-16 years of age in 2003 and currently attending school. Columns 5 to 7 of Table 3.1 report the results for equation 1.1 where the outcome is an indicator for a child currently being below the grade she is supposed to be for her age - that is, if her age is greater than the nationally determined age for that grade. As seen in Panel B, for the entire sample of children, an increase in conflict intensity increases the probability of being overage for older (age 12 to 16) children.

However, as seen in, Columns 5-7 of Panel C, when we run the specification for boys the results are positive in sign and highly significant. A standard deviation increase in conflict intensity increases the likelihood of being over-age for boys (Column 5) by $0.007 \times 2.3 = 0.0161$ or 1.61 percentage points, which is nearly 2.25% of the sample mean. Though we observe this increase for both younger and older cohorts, the magnitude of the effect is larger for the former group. For

younger boys (Column 6), a standard deviation increase in conflict increases the probability of being over-age by $0.010 \times 2.3 = 0.023$ which is roughly 4% of the sample mean for this cohort.

Surprisingly, for girls of ages 6 to 16 (Column 5 of Panel B), an increase in conflict intensity reduces their probability of being over-age and this effect is driven by the younger girls.

Years of education

Next, we study whether conflict affected the number of years of education of children. We study children below the age of 16 at the time of the survey and hence, can only analyze the short-run effects of conflict on educational achievement. Table 1.8 reports estimates for years of education. As observed in Panel A, a one standard deviation increase in conflict intensity decreases years of education of exposed children by $0.031 \times 2.3 = 0.0713$ years or approximately by a month. This estimate is only 0.6% of the sample mean. This result is largely driven by the drop in the years of education of boys, as observed in Panel C. A standard deviation increase in conflict intensity reduces years of education of boys by $0.055 \times 2.3 = 0.1265$, i.e., roughly by almost 1.5 months.

1.6.4 Potential Threat to Identification

Exogeneity of Violent Events

Numerous studies put conflict on the left-hand side of an equation that consists of demographic characteristics, resources, geographic and political conditions on the right-hand side in an attempt to provide explanations for when and why conflict arises in a particular setting, between two or more groups. This literature has explored and found various determinants of conflict such as, the presence of natural resources and 'lootable wealth' (Weinstein, 2006; Ross, 2004, 2006; Adhvaryu et al., 2018), international aid (De Ree and Nillesen, 2009; Nunn and

Qian, 2014; Crost et al., 2014), arbitrary national boundaries (Michalopoulos and Papaioannou, 2013), inequality and ethnic cleavages (Cederman et al., 2013, Montalvo and Reynal-Querol, 2005, Esteban et al., 2012), the opportunity cost of conflict (Miguel et al., 2011; Dube and Vargas, 2013), the lack of political accountability and democracy (Skrede Gleditsch and Ruggeri, 2010) and other types of exploitative institutions (Richards, 1996; Wood, 2003). While conflict, in and of itself, may never be fully exogenous, we test for valid concerns that may prove as a threat to our identification strategy.

As a first pass, we run the following specification to test for consistent month, year, district effects:

$$Intensity_{jt} = \beta_0 + \beta_1 \mathbb{1}(month_t) + \beta_2 \mathbb{1}(year) + \beta_1 \mathbb{1}(district_j) + \varepsilon_{jt} \tag{1.3}$$

where we test for the presence of consistent month, year, and district-specific effects. We then plot the residuals from this regression along with the number of victims due to conflict across time in Figure 1.6 and we see that these residuals almost perfectly align with the number of victims from conflict. This shows that unobservable time and district level characteristics are not affecting our results.

1.7 Mechanism

One of the potential mechanisms driving our contemporaneous outcomes is that an increase in violent events changes parents' perception of risk, hence, altering their decisions related to children. This causal channel aligns with the theoretical model provided by Estevan and Baland (2007). Their model shows that when there is an increase in child mortality risk and parents are not very altruistic, child labor increases whereas schooling decreases. An increase in mortality risk hinders

parents from truly internalizing the impact of child labor on their children's welfare. Therefore, they prefer immediate transfers from their children in the form of child labor rather than risky investments like education. The need for immediate transfer can also explain why violent events negatively impact boys than girls. Larger portion of a child's time allocation is on a physically strenuous and arduous task like agricultural work where the returns might be higher from boys. On health-seeking behavior, our findings echo the results from Molina (2016). She finds that local violence in the Philippines reduced curative care utilization for children by their parents due to avoidance behavior. Violence increases the risk of being victimized which then translates to higher non-monetary costs of seeking health care.

Valente (2013) reports finding positive effects of Nepal's civil war on the education of girls with no significant impact on the educational achievements of boys. She argues that the positive effect on female educational attainment might be due to change in societal attitude toward female schooling and the Maoist policy[13] of coercing parents to send their daughters to school. Though our results do not find a significant impact of conflict on the educational achievements of girls, we do find that girls are more likely to be in the grade appropriate to their age. Maoist's motto of a more equitable society might be one of the potential channels driving our results on education.

1.8 Conclusion

This paper intends to document the effects of violent events on short-run economic decisions and outcomes. We focus on aspects of human capital accumulation, such as education, and health, and child's time use. Using microdata from a unique database of violent events we find that during the periods of heightened

[13]Although there are several anecdotal evidence of Maoist's policy disrupting schooling.

violence, parents are more likely to involve their children, especially boys, in work-related activities. Conflict-related events also hamper education of boys. However, increase in violence reduces curative-care seeking for girls rather than boys. The potential connection between a boy's productivity at arduous tasks like agricultural work and sound health might be a motivating factor in play here.

So far we have not been able to perfectly disentangle whether the forces of demand or supply are at work, but this is something we are interested in doing for future work. One could think of violence as an imposition of a tax to everyday economic activity and this tax could distort both the supply and demand side. Alternatively, in the long run, one could think of violence affecting preferences as well. To disentangle whether violence affects prices or preferences, we may need a structural model that poses some testable implications of the effects of an increase in risk.

Finally, whether these short-run effects have long-run consequences is a valid question. This is the second, and more interesting, question that we wish to answer in future work. Are individuals who have invested less in education due to the risk of violence worse off, and if so, do they have worse labor market outcomes in the future? Are children who have not been provided proper curative care in the early stages of life worse off on their later life outcomes? My second chapter partially answers these questions by analyzing the long-run implications of exposure to conflict in childhood.

1.9 Figures

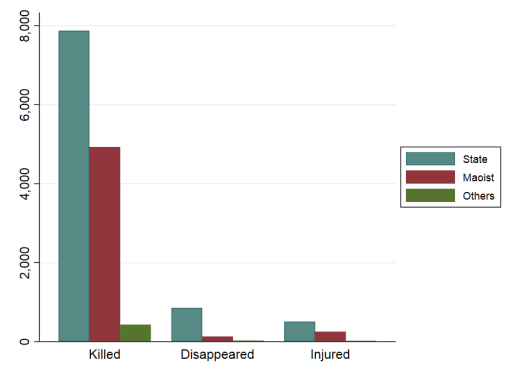
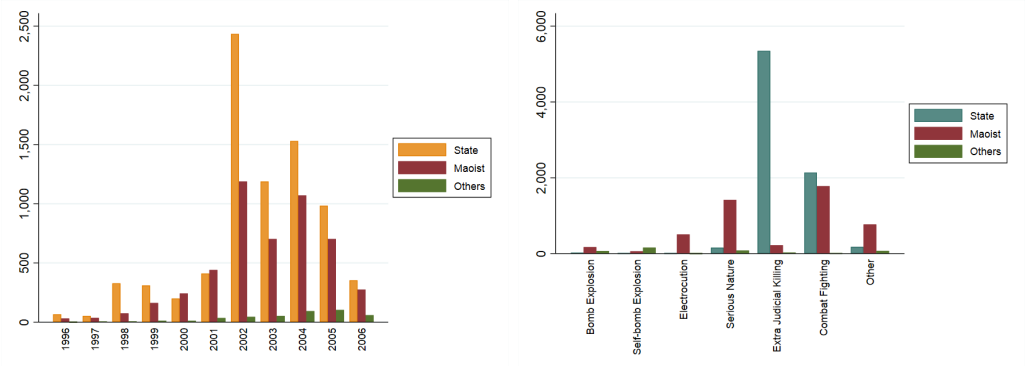


Figure 1.1: Outcome of incident by perpetrator

Notes: In the figure above, we plot the outcomes (killed, disappeared, and injured) of violent events by perpetrator of respective incidence.



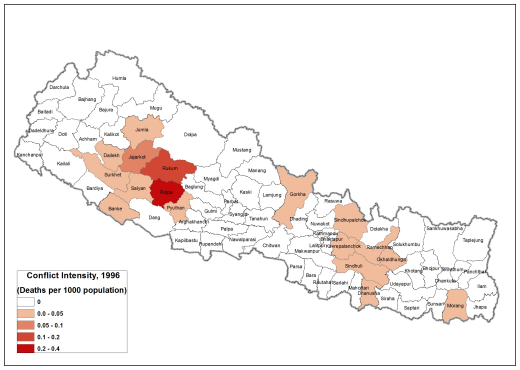
(a) Number of Deaths by Perpetrator

(b) Cause of Death

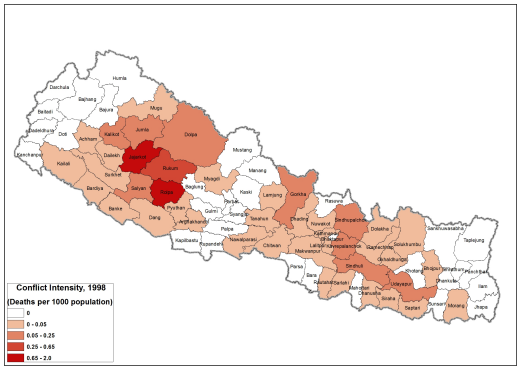
Figure 1.2: Number of Victims: by perpetrator and by cause of death

Notes: Figure (a) plots the total number of deaths each year by perpetrator. Figure (b) plots the cause of death by perpetrator. In this figure, serious nature deaths were caused by heinous killings that involved prolonged torture of the victim by the perpetrator.

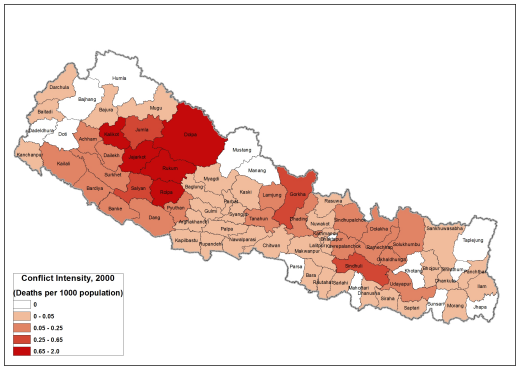
Figure 1.3: Conflict Intensity: 1996–2006



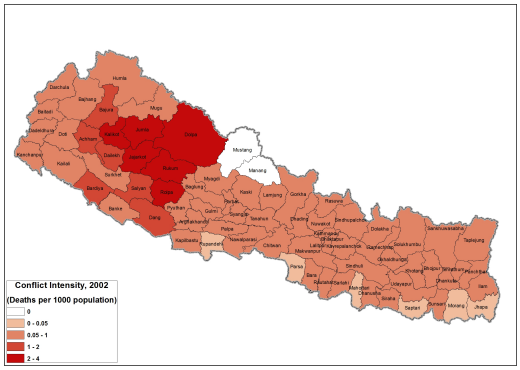
(a) Conflict Intensity (cumulated) by districts in 1996



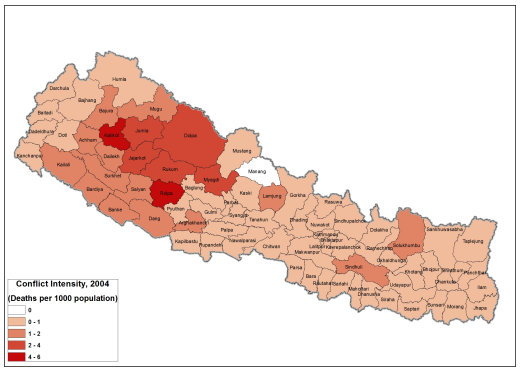
(b) Conflict Intensity (cumulated) by districts from 1996-98



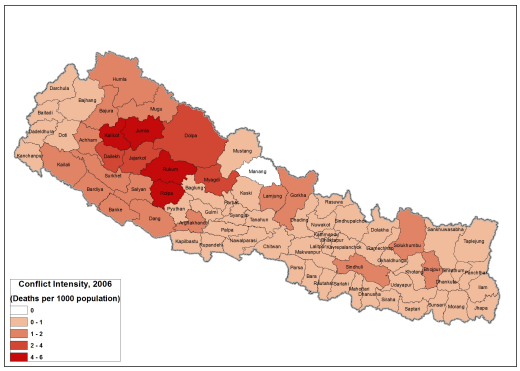
(c) Conflict Intensity (cumulated) by districts from 1996-00



(d) Conflict Intensity (cumulated) by districts from 1996-02



(e) Conflict Intensity (cumulated) by districts from 1996-04



(f) Conflict Intensity (cumulated) by districts from 1996-06

Notes: The maps above show the spread of Nepalese Civil War (in terms of conflict intensity) from 1996-2006. Conflict intensity is measured as the number of cumulated conflict related victims from 1996 to year on the figure per thousand population within a district. Although this district level breakdown of conflict intensity provides information on geographical spread of conflict across time, my analysis actually uses VDCs and municipalities (second lowest administrative unit) level analysis.

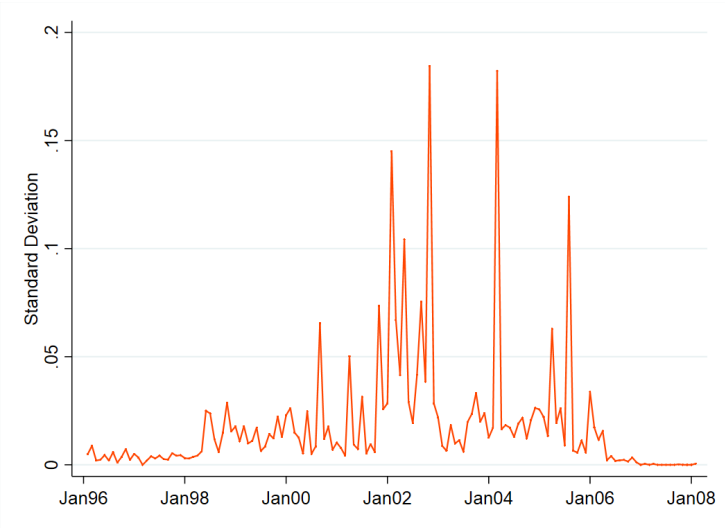


Figure 1.4: Spatial Variation in Conflict Intensity (across time)

Notes: In the graph above, for each time period, we provide the standard deviation in conflict exposure across districts. Conflict exposure (intensity) is measured as casualties/1000 population.

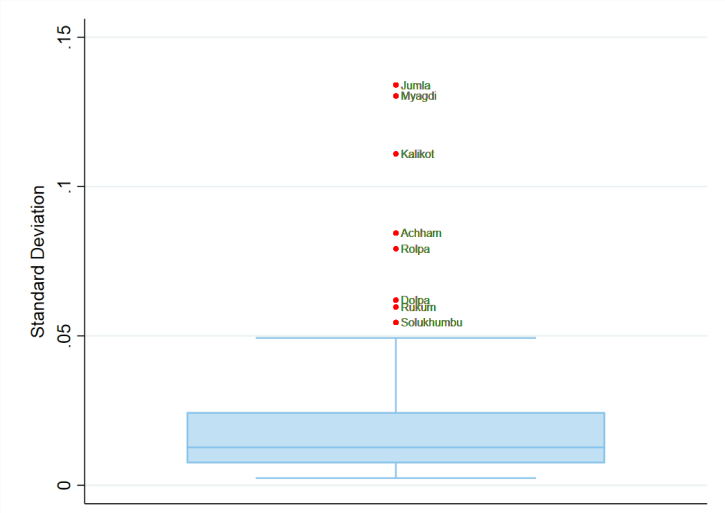


Figure 1.5: Temporal Variation in Conflict Intensity (across districts)

Notes: In the box plot above, we provide the standard deviation in conflict exposure across different time period. Conflict exposure (intensity) is measured as casualties/1000 population.

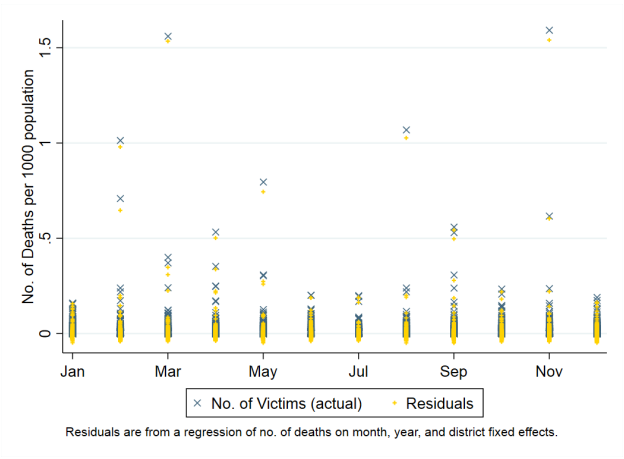


Figure 1.6: Test for Exogeneity of Conflict

Notes: In the figure above, we plot the residuals of the regression of conflict intensity on month, year, and district fixed effects.

1.10 Tables

Table 1.1: Summary Statistics

	Mean	SD	N
Panel A: Time Allocation Outcomes (Age 5-16)			
Total hrs worked in past 7 days in:			
all activities	10.8	17.6	7791
agriculture	6.3	13.2	7791
domestic work	3.6	8.5	7791
Total hrs worked in past 12 months in:			
all activities	426.3	724.0	7791
agriculture	234.7	500.1	7791
domestic work	159.4	379.9	7791
Panel B: Education Outcomes (Age 6-16)			
$\mathbb{1}$(Ever enrolled)	0.8	0.4	7106
$\mathbb{1}$(Currently attending school)	0.8	0.4	7104
$\mathbb{1}$(Over-age for the grade)	0.7	0.5	5479
Education (years)	5.2	3.4	7106
Time taken to primary school (minutes)	17.0	23.7	7106
Panel C: Health Care Outcomes (Age 0-16)			
$\mathbb{1}$(Any curative care)	0.08	0.3	10914
Time taken to health facility (minutes)	46.9	67.8	10914
Panel D: Other Variables (Age 5-16)			
Female	0.5	0.5	7791
Child's age	10.4	3.4	7791
Rural location	0.8	0.4	7791
HH head's education (years)	3.9	5.0	7791
Mother's education (years)	1.8	3.8	7790
Household's size	7.0	3.1	7791
Wealth	12.8	1.3	7791

Notes: The table above provides mean and standard deviation for NLSS (2003) data. Panel A reports the summary statistics for time allocation outcomes. Total hours is a continuous variable and it is the total sum of time spent in different activities outside schooling in the past 7 days. Panel B reports the summary statistics for educational outcomes. Ever enrolled is an indicator for whether the child has been ever enrolled in school upto the time of the survey. Panel C report the summary statistics for health-seeking behavior where Any curative care is an indicator for if the child was taken to a health service facility in the past 30 days. Wealth in Panel D is the log of total assets owned by the household.

Table 1.2: Summary Statistics - Conflict

	Mean	SD	Min	Max
Total no. of deaths/1000 population:				
in past 30 days	0.02	0.10	0	1.3
in past 12 months	0.2	0.6	0	7.9
from birth to survey date	0.6	2.3	0	41.8

Notes: The table above provides mean and standard deviation for conflict intensity. Conflict exposure denotes no. casualties/1000 population in a village/municipality in past 30 days, past 12 months, and from birth of a child to the date of the survey, respectively.

Table 1.3: Effect of exposure to conflict in past 30 days on child's time allocation and labor

	Total hours worked			Agricultural work			Domestic work		
	5 to 16	5 to 11	12 to 16	5 to 16	5 to 11	12 to 16	5 to 16	5 to 11	12 to 16
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
Panel A: All Sample									
Conflict	4.205**	3.939***	3.849	5.340***	4.334***	7.683**	-0.337	-0.125	-1.498
	(1.974)	(1.508)	(3.877)	(1.692)	(0.993)	(3.685)	(0.658)	(0.948)	(1.407)
Obs.	7790	4606	3184	7790	4606	3184	7790	4606	3184
Mean Outcome.	10.780	5.300	18.709	6.345	2.941	11.271	3.615	2.231	5.618
Panel B: Female Only									
Conflict	2.504	4.645*	-2.330	2.616	4.412***	-1.218	0.856	0.653	0.752
	(2.023)	(2.379)	(5.110)	(1.752)	(1.593)	(4.873)	(1.042)	(1.218)	(2.464)
Obs.	3822	2270	1552	3822	2270	1552	3822	2270	1552
Mean Outcome.	13.545	6.904	23.264	6.795	3.060	12.261	6.093	3.670	9.639
Panel C: Male Only									
Conflict	7.705***	4.261**	11.460**	9.711***	4.542**	17.623***	-0.849	-0.192	-2.472
	(2.860)	(2.037)	(5.586)	(2.719)	(2.231)	(5.707)	(0.775)	(0.762)	(1.804)
Obs.	3968	2336	1632	3968	2336	1632	3968	2336	1632
Mean Outcome.	8.115	6.904	14.377	5.912	2.825	10.329	1.228	0.832	1.794
Survey Year and Month, Ethnicity & District X Stratum Fixed Effects & Controls									

Notes: The table above reports the estimated coefficients (β_1) from specification 1.1. Conflict denotes casualties/1000 population in a village or a municipality in the past 30 days. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: child's gender, and age, rural or urban region, education of the household health and mother, household size, wealth, and village level population. The outcome variables are total hours worked in specific activities in past 7 days. Domestic work also includes hours spent collecting water, and firewood. Panel A presents results for entire sample. Panel B & C show results for female and male sub-sample, respectively. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 1.4: Effect of exposure to conflict on curative health care seeking

	Any curative health care				
	0 to 16 [1]	0 to 4 [2]	5 to 16 [3]	5 to 11 [4]	12 to 16 [5]
Panel A: All Sample					
Conflict	-0.052**	-0.085	-0.034**	-0.047**	-0.014
	(0.022)	(0.063)	(0.013)	(0.021)	(0.031)
Obs.	10912	3120	7792	4607	3185
Mean Outcome.	0.085	0.161	0.054	0.061	0.045
Panel B: Female Only					
Conflict	-0.082*	-0.106	-0.080**	-0.072**	-0.103
	(0.042)	(0.104)	(0.034)	(0.036)	(0.067)
Obs.	5377	1554	3823	2271	1552
Mean Outcome.	0.076	0.140	0.049	0.055	0.042
Panel C: Male Only					
Conflict	-0.023	-0.090	0.018	-0.014	0.048
	(0.032)	(0.077)	(0.037)	(0.062)	(0.035)
Obs.	5535	1566	3969	2336	1633
Mean Outcome.	0.094	0.182	0.059	0.067	0.048
Survey Year and Month, Ethnicity & District X Stratum Fixed Effects & Controls					

Notes: The table above reports the estimated coefficients (β_1) from specification 1.1. Conflict denotes casualties/1000 population in a village or a municipality in the past 30 days. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: child's gender, and age, rural or urban region, education of the household health and mother, household size, wealth, time taken to health service center and village level population. The outcome of interest is an indicator that takes value 1 if any curative care was sought for the child. Panel A presents results for entire sample. Panel B & C show results for female and male sub-sample, respectively. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 1.5: Effect of exposure to conflict on health care utilization

	Any curative health care (Sick only), Age 0-16		
	All Sample [1]	Female [2]	Male [3]
Conflict	-0.008	-0.863**	0.493***
	(0.181)	(0.396)	(0.177)
Obs.	1372	632	740
Mean Outcome.	0.676	0.644	0.703
Disease, Survey Year and Month, Ethnicity & District X Stratum Fixed Effects & Controls			

Notes: The table above reports the estimated coefficients (β_1) from specification 1.1. Conflict denotes casualties/1000 population in a village or a municipality in the past 30 days. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: child's gender, and age, rural or urban region, education of the household health and mother, household size, wealth, time taken to health service center and village level population. The outcome of interest is an indicator that takes value 1 if any curative care was sought for the child. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 1.6: Effect of exposure to conflict on number of children reported sick

	Number of sick children aged 0-16		
	All Sample [1]	Female [2]	Male [3]
Conflict	0.024	0.014	0.029
	(0.022)	(0.026)	(0.032)
Obs.	4740	2422	2536
Mean Outcome.	1.101	1.052	1.053
Date and Location Fixed Effects			

Notes: The table above reports the estimated coefficients (β_1) from specification 1.2. Conflict denotes casualties/1000 population in a village or a municipality in the past 30 days of reported date of sickness. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. The outcome of interest is total number of sick children reported in a particular date in a village or municipality. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 1.7: Effect of exposure to conflict on educational status

	Ever Enrolled	Currently Attending			Over Age		
	6 to 13	6 to 16	6 to 11	12 to 16	6 to 16	6 to 11	12 to 16
	[1]	[2]	[3]	[4]	[5]	[6]	[7]
Panel A: All Sample							
Conflict	-0.001	-0.005**	-0.003	-0.007***	-0.000	-0.001	0.003*
	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)
Obs.	5264	7103	3929	3174	5478	3205	2273
Mean Outcome.	0.841	0.776	0.818	0.725	0.707	0.607	0.846
Panel B: Female Only							
Conflict	0.000	-0.002	0.001	-0.023	-0.011***	-0.009*	0.000
	(0.003)	(0.003)	(0.003)	(0.016)	(0.004)	(0.005)	(0.017)
Obs.	2549	3467	1920	1547	2434	1458	976
Mean Outcome.	0.785	0.708	0.763	0.641	0.697	0.599	0.842
Panel C: Male Only							
Conflict	-0.002	-0.006***	-0.004*	-0.008***	0.007***	0.010**	0.006***
	(0.001)	(0.002)	(0.002)	(0.003)	(0.002)	(0.005)	(0.002)
Obs.	2715	3636	2009	1627	3044	1747	1297
Mean Outcome.	0.893	0.841	0.871	0.805	0.715	0.614	0.850
Survey Year and Month, Ethnicity & District X Stratum Fixed Effects & Controls							

Notes: The table above reports the estimated coefficients (β_1) from specification 1.1. Conflict denotes total number of deaths per 1000 population in the village or municipality of residence that the child is ever exposed to until the date of survey. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: child's gender, and age, rural or urban region, education of the household health and mother, household size, wealth, time taken to primary school and village level population. Currently attending is an indicator of whether the child is attending school during the time of the survey. Over age take value 1 if the child's age is greater than the recommended age for the class s/he is currently attending. Panel A presents results for entire sample. Panel B & C show results for female and male sub-sample, respectively. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 1.8: Effect of exposure to conflict on years of education

	Years of Education		
	6 to 16	6 to 11	12 to 16
	[1]	[2]	[3]
Panel A: All Sample			
Conflict	-0.031***	-0.013	-0.064***
	(0.012)	(0.009)	(0.022)
Obs.	7104	3930	3174
Mean Outcome.	5.198	3.787	6.946
Panel B: Female Only			
Conflict	-0.004	0.019	-0.149
	(0.018)	(0.015)	(0.139)
Obs.	3468	1921	1547
Mean Outcome.	4.739	3.506	6.271
Panel C: Male Only			
Conflict	-0.055***	-0.047***	-0.073***
	(0.013)	(0.010)	(0.025)
Obs.	3636	2009	1627
Mean Outcome.	5.635	4.055	7.586
Survey Year and Month, Ethnicity & District X Stratum Fixed Effects & Controls			

Notes: The table above reports the estimated coefficients (β_1) from specification 1.1. Conflict denotes total number of deaths per 1000 population in the village or municipality of residence that the child is ever exposed to until the date of survey. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: child's gender, and age, rural or urban region, education of the household health and mother, household size, wealth, time taken to primary school and village level population. The outcome of interest is total years of education. Panel A presents results for entire sample. Panel B & C show results for female and male sub-sample, respectively. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

APPENDIX

1.A Timeline of Nepalese Civil War

1959	New constitution establishes parliamentary democracy (a "partyless" Panchayat system)
1990	"People's Movement" (*Jana Andolan*) ended 28 years of monarchical rule; established *panchayat* system of self-government
February, 1996	Formal announcement of the "Peoples War" by the Communist Party of Nepal (Maoist)
June, 2001	Ten royal family members are massacred in their palace, allegedly by Prince Dipendra
Aug–Nov, 2001	First round of peace talks begin (3 rounds held until November, 2001)
23rd November, 2001	Peace talks collapse
26th November, 2001	State of Emergency is declared and Nepal Army is sent in to attack the Maoists
January, 2003	A second ceasefire is established and a second set of peace talks begin
Apr–Aug, 2003	Three rounds of peace talks held
August, 2003	Maoists withdraw from the ceasefire
September, 2005	Maoists declare a three-month unilateral ceasefire to woo opposition political parties
January, 2006	Maoists decide not to extend the four-month ceasefire stating that the government had broken the ceasefire with numerous attacks on Maoist villages
May, 2006	Nepal's new cabinet declares a ceasefire. The cabinet also announces that the Maoist rebels will no longer be considered a terrorist group. Rebels are also encouraged to open peace talks.
November, 2006	Peace talks end with the signing of the Comprehensive Peace Accord between Prime Minister Koirala and Maoist leader Prachanda. The deal allows the Maoists to take part in government, and places their weapons under UN monitoring.

Notes: As can be seen from the table above, the Maoists repeatedly withdrew ceasefire following multiple rounds of peace talks and these were events that were typically followed by mass strikes of violence, unanticipated acts of violence, destruction of property etc., all as a propaganda for the Maoist cause.

1.B Figures

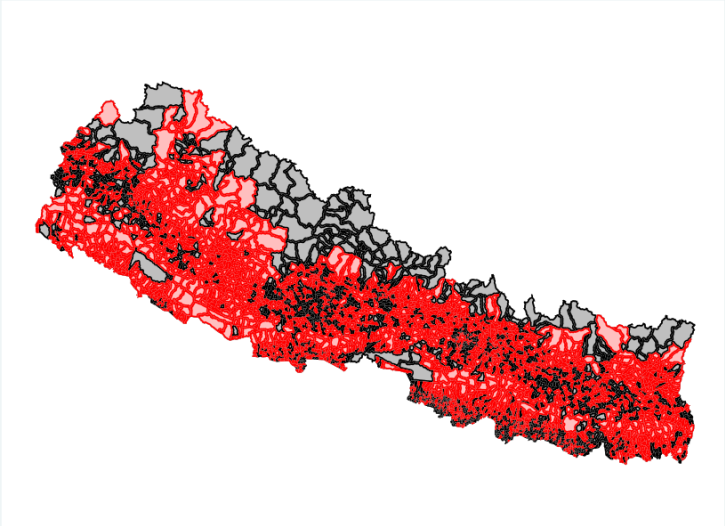


Figure 1.B.1: Village Development Committees (VDCs) & Municipalities of Nepal (in red) that experienced some conflict-related events from 1996-2006.

Notes: Out of 3,915 Village Development Committees (VDCs), the conflict data records some violent events for 2,427 villages.

1.C Tables

Table 1.C.1: Effect of exposure to conflict in past 12 months on child's yearly time allocation and labor

	Total hours worked			Agricultural work			Domestic work		
	5 to 16 [1]	5 to 11 [2]	12 to 16 [3]	5 to 16 [4]	5 to 11 [5]	12 to 16 [6]	5 to 16 [7]	5 to 11 [8]	12 to 16 [9]
Panel A: All Sample									
Conflict	59.091	54.335	74.752	56.329*	51.193*	81.949*	-5.389	-0.354	-15.774
	(43.670)	(44.285)	(58.830)	(29.613)	(26.587)	(46.997)	(16.633)	(26.913)	(23.330)
Obs.	7790	4606	3184	7790	4606	3184	7790	4606	3184
Mean Outcome.	426.252	204.343	747.336	234.722	105.778	421.294	159.367	93.850	254.164
Panel B: Female Only									
Conflict	63.902	73.892	38.969	58.160*	59.576*	62.590	0.050	11.592	-34.762
	(56.276)	(55.034)	(90.138)	(34.954)	(34.922)	(71.653)	(25.134)	(34.567)	(45.470)
Obs.	3822	2270	1552	3822	2270	1552	3822	2270	1552
Mean Outcome.	552.264	273.491	960.186	255.840	112.428	465.692	269.317	155.266	436.204
Panel C: Male Only									
Conflict	43.300	16.664	136.105**	48.112	36.645*	127.574*	-8.560	-23.145	14.016
	(35.789)	(35.510)	(66.493)	(31.097)	(21.158)	(65.914)	(15.480)	(21.766)	(27.710)
Obs.	3968	2336	1632	3968	2336	1632	3968	2336	1632
Mean Outcome.	304.844	137.119	544.920	214.375	99.312	379.072	53.435	34.144	81.048
Survey Year and Month, Ethnicity & District X Stratum Fixed Effects & Controls									

Notes: The table above reports the estimated coefficients (β_1) from specification 1.1. Conflict denotes casualties/1000 population in a village or a municipality in the past 30 days. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: child's gender, and age, rural or urban region, education of the household health and mother, household size, wealth, and village level population. The outcome variables are total no. of days worked in specific activities in past 12 months. Domestic work includes days spent collecting water, and firewood. Panel A presents results for entire sample. Panel B & C show results for female and male sub-sample, respectively. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

CHAPTER 2

DO ADVERSE CHILDHOOD EXPERIENCES SHAPE VIOLENT AND ABUSIVE ADULT BEHAVIOR?

2.1 Introduction

Family violence is one of the most common and yet, one of the most challenging economic, public health, and law enforcement issues. This type of violence occurs within the most intimate of relationships and often manifests as spousal abuse and child maltreatment. Though domestic violence is a global issue, its prevalence is staggeringly high in low-income countries. Intimate Partner Violence (IPV) is reported to be around 38 percent for South-East Asia and Sub-Saharan Africa compared to 23.3 percent for high-income countries (WHO, 2013). Likewise, maltreatment of children by a family member is also tragically common; 8 out of 10 children (aged 2-14) in developing countries experience violent disciplining by their caregivers (Erten and Keskin, 2017).[1] The pervasive nature of family violence also makes it costly (Fang et al., 2012), but these costs are not just limited to immediate adverse physical effects. For instance, child abuse and neglect has been shown to have negative effects on the human capital accumulation of children, especially on health outcomes.[2] The detrimental effects of family violence are not

[1]The inability of parents to protect their children from child labor, especially the hazardous form, is another method of perpetrating child abuse and neglect. As of 2016, 19.4 percent of children in low-income countries were working as child labor out of which 8.8 percent were in hazardous work (ILO, 2017).

[2]Child maltreatment and neglect has also been shown to have detrimental effect on childhood health outcomes (Morales and Singh, 2015) and later life physical health (Cicchetti and Rogosch, 2001); mental health such as post-traumatic stress disorder (Browne and Finkelhor,

just limited to children. Even a moderate form of spousal abuse has undesirable short and long-run consequences both for the victim and her children.[3]

Family violence comes with a heavy economic burden and, hence, it is crucial to understand what amplifies or curtails this behavior. The existing literature on domestic violence focuses on contemporaneous effects like the relationship between income and spousal abuse (Haushofer et al., 2019); however, relatively less is known about the long-run determinants of these behaviors, especially those related to the perpetration of child abuse and neglect. In this paper, I explore the long-run determinants of family violence by linking exposure to adverse circumstances in childhood to the perpetration of abuse and neglect against children and spouse in adulthood. My focus on childhood experiences is consonant with growing evidence in economics that any influences during this period have a lasting impact on adult outcomes and behavior (Adhvaryu et al., 2014; Akresh et al., 2017). Additionally, correlation studies in psychology suggest that stress generated through traumatic childhood experiences is a crucial risk factor in triggering violence against own family in adulthood (Conger et al., 2012; Thornberry et al., 2012; Saile et al., 2014).

Nevertheless, the causal direction of this effect remains largely unexplored and is a priori ambiguous. On the one hand, exposure to negative experiences in childhood may affect mental health (Singhal, 2018), education, and labor market outcomes (Almond et al., 2018), which may introduce other stressors in adult life

1986; Moeller et al., 1993; De Bellis and Thomas, 2003; Dube et al., 2003; Holmes and Sammel, 2005) and increased risk for adult criminality (Currie and Tekin, 2006). Hazardous and stressful child labor too can have a negative effect on mental health through similar channels related to trauma. Child labor also negatively affects childhood health by exacerbating malnutrition and exposing children to environmental hazards (Parker, 1997; O'Donnell et al., 2002; Forastieri, 2002) and these effects persist into adulthood (Kassouf et al., 2001).

[3]IPV is associated with diminished current health, increase in depressive symptoms and substance use, and a higher risk of developing a chronic disease and chronic mental illness of the victim (Coker et al., 2002; Campbell, 2002). Domestic violence influences the mother's health-seeking behavior which has a negative effect on the physical health of her children (Yount et al., 2011). Likewise, children exposed to spousal abuse at home are more likely to develop emotional and behavioral problems (Holt et al., 2008).

– this may increase the risk of perpetration of abuse and neglect against family members. On the other hand, the ability to cope with difficult situations early in life can make one fully appreciate family relationships (Tedeschi and Calhoun, 2004) and change one's attitude toward violent behavior – this may result in lower perpetration of family violence in adulthood. This paper explores the causal relationship between childhood circumstances and later-life violent behavior in the context of Nepal.

To investigate this relationship, I leverage exposure to a large adverse shock, i.e., an armed conflict or a civil war, in childhood. In particular, I examine the effect of men's exposure to the Nepalese Civil War (1996-2006) in childhood on the perpetration of family violence in adulthood. My data on armed conflict comes from a unique database of victims from the Nepalese Civil War which includes the date and the location of every war-related casualty. I then merge this data with post-conflict nationally representative surveys to access information on adult outcomes.

For identification, I exploit spatial and temporal variation in men's childhood exposure to armed conflict at the village or municipality level.[4] Using exposure to conflict at the village or municipality level allows conflict-related events to be local enough to influence behavioral outcomes. To construct the childhood exposure variable, I take advantage of the information on the exact month and the year of birth of individuals and the dates of conflict-related events at the local level. Intuitively, I exploit the fact that individuals born in the same month and year but in different localities were exposed to varying intensities of armed-conflict. Likewise, those born in the same locality but in different months and years were also exposed to conflict differentially. This gives me a setting for a quasi-natural experiment where exposure is defined as deaths per thousand population in a

[4]Village Development (VDCs) and Municipalities which are the second-lowest administrative units in Nepal.

village or a municipality.

I find that exposure to local-level conflict during ages 0 to 16 led to a decrease in a man's perpetration of spousal violence during adulthood. The estimated effects are substantial: a one standard deviation increase in husband's childhood conflict exposure decreases the number of reported intimate partner violence acts by 21 percent of the sample mean of the number of reported acts. My findings also reveal that the wife of an exposed man is less likely to experience different forms of spousal violence like, physical and sexual abuse. Exposed men are also less likely to display non-physical coercive behaviors like control over the wife's network of friends and family.

Father's exposure to conflict during his childhood also reduces the use of physical and psychological methods for disciplining children within the household. A one standard deviation increase in father's exposure decreases the use of physical violence on children by roughly 3 percent and psychological aggression by 4 percent of their respective sample means. Another way child maltreatment and neglect manifests is through child labor which tends to violate the most basic child rights. Parents have considerable power over child time allocation outcomes. While making these decisions, parents may fail to internalize the harm that labor might have on their children's welfare. I show that a one standard deviation increase in childhood conflict exposure of the father reduces the total hours worked by his child in market/non-market activities by 1 hour (8% of the sample mean). This is largely driven by the drop in hours worked in economic activities and fetching for water/collecting firewood.

Though not all activities that children engage in within or outside the household are exploitative, there are few activities that are considered to be "hazardous by nature or circumstance". These activities involve working in a dangerous and unhealthy environment, that exposes children to further physical, sexual, and

psychological abuse.[5] I also show that an increase in father's conflict exposure by one standard deviation decreases the probability of his child engaging in activities that require carrying heavy loads (a form of hazardous activity) by roughly 8.4 percent of the sample mean.

Related literature and contribution

This study is closely related to the literature in economics that explores "early life" shocks and the formation of later life preferences and behavior. Childhood trauma experienced through war shapes preferences by changing the parameters of utility functions (Kim and Lee, 2012; Voors et al., 2012). These shifts in preferences affect later life decision making, and behavior. Evidence from child-soldiering shows that childhood exposure to violence alters political beliefs and increases political participation and community engagement later on (Blattman, 2009; Adhvaryu et al., 2014). Additionally, girls abducted into combating displayed resilience and less aggressive social behavior later on despite experiencing high psychological distress (Annan et al., 2011). However, evidence on the effects of "early life" shocks on behaviors is mixed. Women who were exposed to armed conflict in their childhood are more likely to normalize the use of aggressive behavior by their partners and are also more likely to be the victims of domestic violence (Mattina and Shemyakina, 2017). This study makes an importation contribution to this growing literature by being the first to establish a causal link between childhood exposure to war and later-life perpetration of family violence, especially child abuse and neglect.

The second strand of literature that this paper contributes to is the limited research on the inter-generational transmission of shocks in parents' early life. Children of women who were exposed to the Biafran war during their adolescence faced a higher risk of neonatal and infant mortality and were also more likely to

[5]As pointed out in many studies, domestic violence perpetrated toward children is the most common determinant of hazardous child labor (Catani et al., 2009; Makhoul et al., 2004)

be stunted and underweight (Akresh et al., 2017). Likewise, women exposed to disease environment or weaker health at birth and during early childhood were likely to give birth to children with low birth weights (Currie and Moretti, 2007; Almond et al., 2012). Existing psychology literature, without making any causal inference, shows that exposure to trauma due to being physically abused as a child, war or natural disaster potentially contributes to parental perpetration of abuse against children (Craig and Sprang (2007), Saile et al. (2014)) affecting their cognitive and non-cognitive development. I add to this literature by focusing on the persistence of inter-generational causal impacts of adverse parental childhood circumstances due to war on child abuse and time-allocation outcomes.

The rest of the chapter is organized as follows. In Section 2.2, I elaborate on the Nepalese Civil War. In Section 2.3, I discuss the main data sources that I use in the chapter. Section 2.4 lays out the empirical strategy, Sections 2.5 and 2.6 present the main results and Section 2.7 outlines robustness checks. Section 2.8 concludes this chapter..

2.2 Background

The Nepalese civil war

On February 13, 1996, the Communist Party of Nepal (Maoist) (CPN-M) formally launched a rebellion against the government termed as the "People's War". This resulted in a prolonged armed conflict between the CPN-M forces and the government of Nepal that lasted until the Comprehensive Peace Accord was signed in 2006. During this period over 13,000 people were killed and about 1,300 went missing (UN, 2012).[6]

[6]Different sources provide different estimates for this figure. The government claims that a total of 12,686 individuals were killed; although, since the State was actively involved in killings during this period, the government has an incentive to under-report. While the National

Historically, Nepal was governed as an absolute monarchy. During the early 1990s, Nepal transitioned to a constitutional monarchy, following a pro-democracy movement – the *Jana Andolan* ("People's Movement") – that witnessed the unification of various political parties towards the establishment of a constitutional framework. The "People's Movement" led to the establishment of multiparty democracy and voting rights, and in November 1990, the new constitution was drafted. This raised expectations of social progress, and some historians believe that this was one of the factors that contributed to the onset of internal conflict in 1996. Over the course of the next ten years, acts of violence and destruction, human rights abuses, and mass killings by both, government forces and the CPN-M forces, were committed across Nepal's 75 districts.[7] Appendix 1.A shows the general time-line of key events during this civil war.

The CPN-M militia served under the leadership of a Chairman, who was also the Supreme Commander of the People's Liberation Army (PLA), which was formed in September 2001. According to a UN (2012) report, the Maoist militia had between 5,000 to 10,000 active combatants throughout the period of conflict and towards the end had expanded to multiple divisions across the country that was organized under three commands that were under the authority of the Supreme Commands and four Deputy Commanders. The PLA's playbook included guerrilla attacks, and sabotage and propaganda actions, such as random destruction and seizure of property (Shrestha, 1997).

Apart from the CPN-M militia, the government's forces were also actively involved during the conflict period to fight against the PLA. Initially, since the conflict was seen as a minor threat, the Nepal Police (NP) was mobilized in

Geographic Magazine also reports a similar figure as the government's (Bendiksen and Douglas, 2005), I identify 13,247 killings from my microdata.

[7]With the exception of two districts – Manang and Mustang – all other districts witnessed conflict-related killings. Manang and Mustangs districts are both high-altitude trans-Himalayan regions and very sparsely populated.

order to contain the insurgency. In 2001, the Armed Police Force of Nepal, a paramilitary force, was set up in order to fight the insurgents due to the growing power of the Maoist forces. The Royal Nepalese Army (RNA) was not deployed by the government until late 2001 citing that the insurgency was a law and order problem that was to be addressed by the Nepal Police. My microdata covers victims of violence from both sides of the conflict.

2.3 Data

2.3.1 Microdata on civil war

The data on victims from the Nepalese Civil War was collected by the Informal Sector Service Center (INSEC), a non-governmental organization based in Nepal that works with human rights issues.[8] This was compiled from qualitative records from investigations of international human rights violations and international humanitarian law violations during the ten-year insurgency and are cross-referenced in the United Nations Human Rights Office of the High Commissioner's Nepal Conflict Archive[9]. The data maintained by INSEC has been used in previous studies, like those by Do and Iyer (2010)[10] and Shrestha (2017), and is, as per my knowledge, the most reliable and impartial database on conflict intensity during the civil war. It is also unique in nature since it is a census of a known population of victims from the war. The unit of observation is an individual victim. The data also provides information on whether the victim was killed, injured, or disappeared along with information on the location and the exact date of the violent

[8]This database is unique in that it is a census of victims from domestic conflict and is compiled by an impartial entity–Informal Sector Service Center (INSEC). This is important since both the Nepali government and the Maoist forces were actively involved in killings and acts of violence throughout this period. It is only reasonable to suspect that if the government were to build a similar database, it would necessarily try to underplay its role in the civil war.

[9]http://nepalconflictreport.ohchr.org

[10]I use geographically granular data on conflict than this study.

event.

Out of 3,915 Village Development Committees (VDCs) and municipalities, the conflict data records some violent events for 2,427 of them. Figure 1.B.1 shows all the villages marked in darker shades for which some kind of conflict-related event has been recorded in the INSEC data. Figure 1.3 shows district[11] level spatial and temporal variation in conflict related events from the start of this war to its end[12]. Violent events first started in districts like Rukum and Rolpa and slowly started spreading in neighboring districts with varying and greater intensity (as it goes from lighter to darker shades). Here, for each individual map, I define intensity as conflict related events (deaths, killing or disappearances) per 1000 population within a district for the given time frame.

The INSEC data reports 14,959 fatalities, of which 13,247 were killings, 932 were disappearances, and 780 were instances when the victim sustained disability inducing injuries.[13] Figures 1.1 depicts the three major outcomes of violent events (killed, disappeared, or injured). More than half the number of deaths were caused by the government's forces. Figure 1.2(a) summarizes the distribution of deaths over the period of the conflict by perpetrator (State, Maoist, and Others). This data also captures the delayed involvement of the Nepali government's forces in the civil war. Specifically after 2001, once the army was deployed, the number of deaths due to the State were strikingly higher than those caused by the Maoists. Figure 1.2(b) depicts the causes of these deaths as recorded in the INSEC database. In this figure, serious nature deaths were caused by heinous killings that involved prolonged torture of the victim by the perpetrator. By construction the data excludes acts of violence where people were not killed or

[11] VDCs (rural) and municipalities (urban) are the second lowest administrative units in Nepal. Collection of VDCs and municipalities make up a district.

[12] Although this district level breakdown of conflict intensity provides information on geographical variation in conflict across time, my analysis actually uses Village Development Committees (VDCs) and municipalities level conflict.

[13] Author's calculation

injured, or did not disappear. For instance, if a building was torched and nobody was affected, this data would not record such an incident. To this extent, it includes only victimization from conflict and not a broader set of threat to property and life due to conflict.

2.3.2 Data on family violence and child time allocation

Demographic and Health Survey (DHS) data

To study the effects of adverse childhood conditions on perpetration of spousal abuse, I use the DHS-2016 survey. I use the *Individual Recode* which contains information on a nationally representative cross-section of women aged 15 to 49 at the time of the survey. A random sample of these women was also surveyed on their experiences of sexual, physical, and emotional spousal abuse under the Domestic Violence module. In accord with the World Health Organizations (WHO) guidelines, the module can be only implemented if absolute privacy can be obtained and maintained throughout the interview time frame. The DHS uses the modified Conflict Tactics Scale (CTS) to measure spousal violence. Instead of asking one single question on whether a woman was victimized or not, modified CTS asks a series of questions on different acts of spousal violence. This reduces the probability of violence measure being affected by different understandings among women of what constitutes a violent act. Likewise, it also gives respondents multiple opportunities to disclose the experience of violence. The outcome variables of interest and their components are included in Table 2.A.1 in Appendix 2.A.

The female recode of the DHS that includes the violence variables does not include information on the husband's month and year of birth which is essential to define my exposure variable. Unfortunately, not all women aged 15-49 who were interviewed had their partner selected for the male module. Therefore, I limit my analysis to those women whose husbands or partners were interviewed under the

men's module. This matched data-set allows me to understand the effect of husband's childhood exposure on his wife's experience of intimate partner violence. Additionally, I use the *Male Recode* of DHS-2016 which provides information on men's attitude toward domestic violence.

Multiple Indicator Cluster Survey (MICS)

In order to study the impact on inter-generational outcomes, I use data from the Multiple Indicator Cluster Survey, 2014. This is a cross-sectional survey designed to assess the situation of children and women in Nepal and also covers a range of household characteristics including asset ownership. The household questionnaire of this survey includes a module on Child Labor which was administered to one randomly selected child (aged 5-17) in the sampled households with one or more children aged 1-17. If the randomly selected child was aged 1-14 years, then the Child Discipline module was also administered.

Respondents to the household questionnaire were asked a series of questions on the methods used by adults in the household to discipline the selected child during the month preceding the survey. The child labor module includes questions on the type of work and the number of hours engaged in it. Data on child work were collected on both economic activities (paid or unpaid work within or outside the household) and domestic work (household chores, such as cooking, cleaning, caring for children, collecting firewood, or fetching water). The survey does not provide any information on the industry of employment and the associated compensation or wages provided. The module also collects information on "hazardous form of child labor" [14] comprising work that exposes children to dangerous working

[14]The suggested definition of hazardous child labor by ILO includes "(a) work which exposes children to physical, psychological, or sexual abuse; (b) work underground, under water, at dangerous heights, or in confined spaces; (c) work with dangerous machinery, equipment and tools, or which involves the handling or transport of heavy loads; (d) work in an unhealthy environment which may, for example, expose children to hazardous substances, agents or processes, or to temperature, noise levels, or vibrations damaging to their health; (e) work under particularly difficult conditions such as work for long hours or during the night or work where the child is unreasonably confined to the premises or the employer." (Edmonds, 2007)

conditions and substances which are potentially damaging to their health and which exposes them to maltreatment. Table 2.A.2 describes the construction of these variables of interest from the MICS survey.

Lastly, a man might have a greater influence on his child's upbringing if he lives in the same household as his children. Therefore, in my sample, I include only those children whose father lives in the same household as them.

2.3.3 Population Census of Nepal

In addition, I use the 2011 wave of Nepal's national population census to access local level birth cohorts size. In order to weight the number of victims by village(or municipality) level population, I use the census wave of 2001.

2.3.4 Summary statistics

Table 2.1 reports summary statistics for the variables on spousal violence from the DHS. As seen in Panel A, 21 percent of female respondents reported to experiencing at least one act of less severe physical violence ever perpetrated by their spouse. Likewise, 10 percent of them experienced some kind of severe physical violence. Sexual violence and emotional abuse against women by their partners is also high in my sample at 8 and 10 percent, respectively.

Another way male dominance over his partner can manifest is through a display of controlling behaviors, such as frequent expression of jealousy or accusation of infidelity, limiting contact with friends or family, and insisting on knowing where she is at all times. Panel B of Table 2.1 provides descriptive statistics for whether the husbands of women surveyed in the DHS displayed such behaviors. Nearly 22 percent of women experienced constant jealously or accusation of being unfaithful. Approximately, 16 percent of them reported that their husbands exert control over their social network, i.e., they are frequently prohibited from meeting their female

friends or their contact with family members is limited by their spouse.

Table 2.2 presents the sample mean and standard deviation (s.d.) of key variables from the MICS, 2014 survey for the full sample.[15] My full sample includes only those children whose father is currently present in the household. As seen in Panel A of Table 2.2, 50 percent of children aged 1 to 14 in my sample experienced violent physical disciplining; whereas 30 percent of them were exposed to psychological aggression.

Panel B of Table 2.2 provides the summary statistics for time allocated to various activities. On average, children aged 5 to 17 work 12.4 hours per week in market or non-market activities. The largest portion of working hours, at 5.3 hours per week, is dedicated toward domestic chores like cooking, cleaning, washing clothes, caring for young and elderly, and other daily household tasks. These children spent, on average, 4.7 hours per week on economic activities. These activities involve wager or non wage agricultural work , animal husbandry, helping family or relative's business, and so on. Finally, 2.4 hours per week is spent on fetching water or collecting firewood. The statistics in Panel C show that 30 percent of children are involved in carrying heavy loads which, according to ILO, is classified as a hazardous form of child labor. Additionally, about 4 percent of children aged 5 to 17 reported working with dangerous tools or operating heavy machinery.

Finally, Table 2.3 provides summary statistics on man's conflict exposure. My measure of conflict intensity is calculated as the number of conflict-related casualties per thousand population in a village/municipality where the man resides at the time of the survey. On average, the fathers of the children in the MICS sample were exposed to 0.14 casualties per thousand population between ages 0-16, with most exposed fathers experiencing approximately 45 casualties per thousand pop-

[15]Table 2.A.4 provides the statistics for rural sample.

ulation. Likewise, husbands/partners of women in the DHS sample experienced 0.41 casualties per thousand population.[16]

2.4 Empirical strategy

2.4.1 Overview of strategy

The large number of studies on early life shocks mostly focus on fetal or in-utero origin of later life outcomes. However, there is growing evidence that childhood is a formative and critical period for the formation of preferences, attitudes, and beliefs (Sears and Valentino, 1997; Adhvaryu et al., 2014). Akresh et al. (2017) find a significant negative impact on adult life outcomes of women's war exposure at ages 0 to 16. Likewise, only conflict exposure from age 7-20 had a lasting impact on motivation and behavioral outcomes in an experimental dictator game (Bauer et al., 2014). Therefore, I examine the effect of exposure to conflict between the ages 0-16 on adult outcomes.[17]

The variation in conflict exposure that I exploit is across time and geographical space. Section 2.3.1 shows that different regions of Nepal witnessed conflict-related events at different time periods with varying intensities. To construct a man's childhood exposure variable, I take advantage of the information on the exact month and the year of birth of individuals and the dates of conflict-related events at the local level. Men who were born in different months and years but in the same location were differentially exposed to conflict events up to the age of 16. Figure 2.2 shows this variation in childhood conflict exposure[18] at a given location across birth-year cohorts.[19] In this map, darker the shade of an administrative

[16] Panel D of Tables 2.A.3 and 2.A.4 reports the summary statistics on father's and husband's conflict exposure at age less than 16 for respective rural samples.

[17] Later on, for robustness check, I also increase the age cutoff to 18 and 20 years.

[18] Conflict exposure is measured as number of casualties and other violent events per thousand population in a village or a municipality.

[19] My actual variation is based on not only year of birth but also month.

area, higher is the standard deviation of conflict exposure across men born in different years in that location.

Another source of variation arises from the fact that not all villages and municipalities in Nepal were affected equally at a particular point in time. Therefore, men born in the same month and year but at two different locations were exposed to varying intensity of conflict-related events at age 16 or below. To illustrate this variation, for each birth-year, Figure 2.3 plots the standard deviation of conflict intensity across VDCs and municipalities. Taken together, these two figures show the variation that I exploit in order to identify the long-run and the intergenerational effects of negative childhood experiences.

Finally, my focus on men's childhood exposure rather than women's exposure has two justifications. First, in developing countries with patriarchal values, a father/husband has a big influence on parental and household decision-making (Jayachandran, 2015). Second, three-quarters of domestic violence against women is perpetrated by their male domestic partner (Aizer, 2010). Violence against family is highly likely if used by men as a mechanism to control families, extract resources and income, or as an expressive behavior that provides them with positive utility (Card and Dahl, 2011; Haushofer et al., 2019).

2.4.2 Specification

To formally examine the effects of adverse childhood circumstances experienced by men, I estimate the following specification:

$$Y_{ijmtl} = \alpha + \beta \text{ exposure}_{jmtl} + \theta^{'} X_{ij} + \delta_l + \gamma_t + \epsilon_{ijmtl} \tag{2.1}$$

where Y_{ijmtl} is an outcome variable for a woman (or a child) i married to a husband (or born to a father) j who was born in month m of year t and is living in location l at the time of the survey. Here, l can be a VDC or a

municipality which are Nepal's second-lowest administrative units. The main variable of interest, $exposure_{jmtl}$, is exposure to conflict, which is measured as the number of casualties per thousand population in location l when j was between ages 0 to 16. To construct conflict intensity, I use the information on the month and the year of birth of the husband (or father) which allows me to measure this exposure variable more precisely. X_{ij} is the set of household and individual level controls that depend on whether the outcome variable is related to children or women. All specifications include household size, wealth score, and dummies for ethnicity variables. The coefficient of interest, β, measures the effect of a unit increase in conflict exposure on the outcome variable of interest. ϵ_{ijmtl} is the error term of the regression model. Finally, I estimate all regressions using Ordinary Least Squares (OLS) and cluster standard errors at the village or municipality level.

A key issue in this type of study is that individuals might select themselves into areas that are prone to war. Also, localities that are more likely to experience conflict-related events may share certain characteristics that also affect abusive behavior in adulthood. To control for unobservable location-specific characteristics driving both armed-conflict and adult outcomes, I include location fixed effects (δ_l). Including location fixed effects, however, only controls for time-invariant area-specific-factors. If older men are more likely to justify child abuse or spousal violence than younger men, including just location fixed effects fails to control for this. I, therefore, take advantage of village(municipality)-specific variation in conflict events across time to include year of birth fixed effects. γ_t denotes fixed effects for man's year of birth which controls for non-linear trends across my sample. In other words, γ_t controls for location-invariant unobservable characteristics like attitudes, beliefs or norms common to individuals born in the same year. Lastly, I also run another specification that includes region-specific linear

time trends ($\lambda_r \times t$).[20] Region-specific linear time trends are included in order to capture unobservable characteristics that vary across regions and over time. For instance, men born in different years and regions of the country can be exposed to different policies (like education) that affect their behavior.

For a causal interpretation of my results, it is crucial for the conflict exposure variable to be exogenous. To provide support for the exogeneity of this variable, I check whether individuals appear to be observably different at the time of the survey based on how much conflict they were exposed to in childhood. In other words, I check for whether there is any selection on observables in my data. Specifically, I regress the various demographic variables that I use as controls on childhood conflict exposure while controlling for year and location fixed effects. Following Currie and Rossin-Slater (2013), if location and year fixed effects included in this regression also sufficiently control for selection, then we should not see any significant effects of conflict exposure on demographic characteristics. Table 2.A.5 reports results for this regression. Across a total of 60 coefficients, only 6 are significant at the 10 percent level, out of which only 2 are significant at the 5 percent level. The magnitude of two coefficients significant at the 5 percent level is too low to be a cause for concern. This suggests that controlling for location and birth year fixed effects actually do a good job of controlling for differences among individuals exposed to conflict.

Another threat to the causal interpretation of the β coefficient is migration. Armed-conflicts and wars often lead to dislocation and migration. If men who are more likely to be violent, are also more likely to migrate out due to conflict, then the induced endogeneity might lead to biased results. I have attempted to address this issue of migration in several ways. Firstly, following Currie and Rossin-Slater (2013), the test for whether individuals in my sample appeared to be observably

[20]Districts in Nepal were grouped into five development regions.

different based on conflict exposure also addresses the possibility of endogenous migration. The results reported in Table 2.3 do not raise any concerns in this regard. Secondly, for the DHS sample, I restrict my analysis to only those men who have lived in the same village/municipality for more than 10 years. This includes all individuals who have lived in the area since before 2006. I include the ones who have lived in the area for greater than 10 years to not exclude those men who migrated into the area at a very young age (since this conflict lasted for 10 years) and whose behavior is likely to be affected by conflict. Nevertheless, 96.3% of the sample who have lived in the location for more than 10 years were also residing in the same place even before the conflict started. Unfortunately, I am unable to observe neither the place of birth nor the number of years lived in the current location for my MICS sample. In section 2.7, I further examine other migration-related threats.

2.5 Effects on wife

2.5.1 Intimate partner violence

In this section, I study the effect of a man's exposure to negative childhood circumstances on his wife's experience of domestic violence perpetrated by him. The results for spousal violence are presented in Table 2.4. Columns [1]-[2] and [5]-[6] report results for various domestic violence outcome variables for my full sample, whereas columns [3]-[4] and [7]-[8] present estimated coefficients for the rural sub-sample. I pursue this particular sub-sample analysis because, during the civil war, most of the rural areas were Maoist strongholds whereas the government had more control over cities (Do and Iyer, 2010). Hence, conflict might have disrupted lives more in rural areas. Columns [1]-[2] of Panel A report results for the number of acts of spousal violence (physical, sexual, or emotional) that

a woman being interviewed reported as ever experienced. As seen in Column [1], a one standard deviation(s.d.) increase in husband's conflict exposure, which is equal to 1.93 casualties per thousand population (Table 2.3), decreases the number of reported acts by $(0.209 * 1.93 =)0.403$, or 41.4 percent of the sample mean. This result is largely driven by the drop spousal violence in the rural sample.

Column [1] of Panel B shows that an increase in one s.d. in man's conflict exposure reduces the probability of less severe physical violence by 4.43 $(= 0.023 * 1.93)$ percent points, or by 9.4 percent of the sample mean. Exposed men are also less likely to commit severe physical spousal violence which includes acts like kicking or dragging, trying to choke or burn on purpose, or attacking with weapons. Column [5] of Panel C shows that an increase in conflict exposure at ages 0-16 by one s.d., decreases the probability of carrying out severe physical violence by 3.7 $(= 0.019 * 1.93)$ percent points, or by roughly 35 percent of the sample mean.

Column [1] of Panel D presents the result for sexual violence perpetrated by the husband, which includes any acts of forced (physically or by threat) sexual intercourse or any other sexual acts. A one s.d. increase in the husband's childhood conflict exposure, reduces the likelihood of him committing sexual violence by 4.82 $(= 0.025 * 1.93)$ percent points. Compared to the sample mean, the magnitude of this drop is very large, at roughly 62 percent. For both measures of physical violence along with sexual violence, the results are similar in magnitude and significance for the rural sample. Though negative in sign, there is no significant effect of husband's childhood conflict exposure on the experience of emotional violence by women for my full sample. However, the negative impact of conflict intensity on emotional violence is slightly larger in magnitude and significant at ten percent level of significance for the rural sample.

Tables 2.A.6, 2.A.7, 2.A.8, and 2.A.9 report the effects separately for each individual component of less severe physical violence, severe physical violence, sexual violence, and emotional violence. The results are similar, i.e, all the estimated coefficients are negative. There is a statistically significant reduction in most common acts of spousal violence like being slapped, hair getting pulled/arms getting twisted, getting punched, being dragged, kicked, or beaten up, physically forced for sexual intercourse, and getting humiliated in front of others.

2.5.2 Controlling behaviors

In a patriarchal society like Nepal, men can also use other coercive instruments like displaying controlling behavior in addition to explicit violence. Execution of controlling behavior in an intimate partner relationship can have equally detrimental effects like those resulting from physical or sexual violence. In fact, these behaviors are often precursors to other forms of intimate partner violence. Therefore, I check for whether adverse experience in childhood also affects the probability that a husband displays controlling behaviors toward his wife. Panel A in Table 2.5 reports the effect of man's conflict exposure between ages 0-16 on the likelihood of him getting constantly jealous if his wife talks to other men or accusing her of being unfaithful. The estimated coefficients for my full sample and rural sub-sample are consistently negative, though statistically insignificant.

Seeking help for issues related to domestic violence is still not common. However, if women do seek help or want to confide about being victimized by their spouse, they are more likely to do so with their own friends or family. In the DHS, among women who have experienced some form of domestic violence and sought help, approximately 65 percent answered that their most common source of help is family while 22 percent of them sought help from friends. However, if a man exerts control over his spouse's social network, i.e., is limits her contact with

family or friends, it is likely to create an obstacle for women who need to seek help. Panel B shows that husband's exposure to conflict from ages 0-16 decreases the probability of a married woman experiencing forced social isolation. A one s.d. increase in exposure decreases the likelihood of this particular controlling behavior by roughly 3.5 ($= 0.018 * 1.93$) percent. This result is similar in magnitude for the rural sample.

2.6 Effects on children

2.6.1 Child abuse

In this section, I study the causal effect of a man's exposure to armed conflict from ages 0 to 16 on his child's experience of physical and psychological disciplining. My child abuse variable comes from the MICS, 2014. This survey provides information on whether the selected child for the module experienced some form of disciplining that uses either physical force or verbal intimidation. Unfortunately, it does not provide information on who perpetrated such disciplinary practices. Nevertheless, given that Nepal is a patriarchal society and fathers play an important role in decision making about children, it is important to study the effect of a man's exposure on child abuse. Studies of child abuse in the United States have shown that fathers are as likely as mothers to perpetrate child abuse (Zigler and Hall, 1989; Coohey, 2000). Even in countries like Turkey, the prevalence of violence against children committed by fathers is high, at 19 percent (Erten and Keskin, 2017).

Table 2.6 reports the estimated effect of a man's exposure to armed conflict in his childhood on the use of physical and psychological violence as disciplining methods against his children. The reported coefficients are the estimated β's of equation (3.1). Column [1] of Panel A shows the impact on physical abuse.

A one s.d. increase in conflict exposure, which is equal to 1.1 casualties per thousand population (Table 2.3), decreases the use of physical violence on children by $0.013 * 1.09 = 0.0141$ or 1.41 percentage points. Column [3] of Panel A displays the estimate for the rural sample. The coefficient is negative and significant for this sample and it largely drives the estimate observed in Column [1].

In Column [1] of Panel B, I report the effect of exposure to conflict on the perpetration of psychological abuse against children. An increase in father's conflict exposure by one s.d., decreases psychological aggression against children by $0.012 * 1.109 = 0.0133$ or 1.33 percentage points. This is equivalent to roughly 4 percent of the sample mean. Column [3] in Panel B shows that the effect is similar in magnitude and significance for the rural sub-sample. Table 2.A.10 reports the estimates from equation (3.1)for constructive disciplining which involves parents explaining children why their behavior is wrong. Though the coefficient reported in Column [1] of Panel A is positive, it is small in magnitude compared to the sample mean and not statistically significant.

2.6.2 Child labor

Another way child maltreatment and neglect manifests is through child labor which tends to violate the most basic child rights. Though a significant number of children go to both school and work, engaging in stressful labor can negatively impact their overall development. Next, I estimate the effect of father's conflict exposure on the time use and work of his children. Children have limited authority to adjust their own labor supply and their time allocation decisions on work outside/inside home are mostly made by adults. (Edmonds, 2007) argues that one of the reasons why child labor is considered a major human rights issue is because parents have considerable decision-making power over child time allocation. While making these decisions, parents may fail to internalize the harm that work might

have on children's own welfare.

The theory of the instrumental use of violence argues that men use domestic violence as an instrument to extract rent from women as well as to control their behavior. The extent of violence perpetrated by a man largely depends on the participation constraints of the woman which depends on her outside options and hence, her ability to leave the marriage. Theories on domestic violence, as per my knowledge, do not study motives for perpetrating child abuse. Mainly, children do not have outside options and are obliged to stay with their parents. Imposing a participation constraint in this scenario does not seem to be plausible. This allows fathers to easily use violence as a mechanism to make their children work and extract income, rent, goods, or services for consumption from them.

Next, I estimate the effect of father's conflict exposure on time use of his children. In Table 3.6, I show the results for equation 3.1 on hours spent on various economic and domestic activities in the last 7 days. Column [1] of Panel A reports that a one standard deviation increase in conflict exposure of the father at age 16 or less, reduces the total hours worked by approximately 1 hour ($-0.904 * 1.1 = 0.99444$). This impact is roughly 8% of the sample mean. The coefficient observed in Column [1] in Panel A is largely driven by the drop in hours worked in economic activities and fetching water or collecting firewood. As seen in Column [3] of Panel B, an increase in exposure by one standard deviation leads to a statistically significant decrease in hours worked in economic activities (in the past 7 days) by 33 minutes on average. The largest impact, however, is on hours spent in fetching water/collecting firewood. Fetching for water or collecting firewood in Nepal requires long commuting time and is an arduous task as it requires carrying heavy loads. As observed in Column [1] of Panel C, on average, a one standard deviation increase in conflict exposure decreases hours spent in water or firewood collection by 0.5 hours (30 minutes) which is 20% of the reported sample mean.

Though children spent a significant amount of time on domestic work (5.31 on average) father's conflict exposure in childhood has no significant impact on this activity.

2.6.3 Hazardous child labor

However, not all activities outside schooling performed by children are classified as child labor.[21] There are activities that children do within a household that are neither harmful nor exploitative. Nevertheless, a child who is less than 17 years of age and is forced to participate in activities that are "hazardous by nature or circumstance" for 1 or more hours per week is considered to be child labor (Edmonds, 2007).

Next I estimate the effect of a man's exposure to conflict from ages 0-16 on the likelihood of his child's involvement in harmful working conditions. I do this for two important reasons. Firstly, engaging a child in a hazardous form of labor that exposes him/her to dangerous situation is itself considered to be a form of child abuse and neglect. As children have limited authority to adjust their own labor supply, they are mostly engaged in hazardous activities by adults, especially if they live in the same household as their parents. Secondly, the psychology literature has often pointed out that physical violence perpetrated towards children is the most common determinant of dangerous form of child labor (Catani et al. (2009), Makhoul et al. (2004)).

In Table 2.8, I show the results from equation (3.1) for the effects on hazardous form of child labor. Panel A reports estimates for hazardous economic activities (with or without pay) which involves carrying heavy loads. As reported in Column

[21]The current Child Labor Prohibition Act prohibits children below 14 years of age in engaging in any work. However, it does not differentiate between domestic work and child labor. Nevertheless, the act does state that children aged 15 – 17 years shall not be engaged in work for more than six hours a day and more than 36 hours a week, either with or without additional wages.

[1] of this panel, a one s.d. increase in conflict intensity lowers the probability of a child getting involved in activities that require carrying heavy loads by 2.3 ($0.021 * 1.09 = 0.023$) percentage points. This impact is roughly 8.4 percent of the sample mean. Column [3] of Panel A presents the estimated coefficient for the rural sample. This coefficient is similar in magnitude but more significant than the one for the full sample. Panel B of Table 2.8 presents results for hazardous child labor which involves working with dangerous tools or operating heavy machinery. Though the reported coefficients are negative in sign, they are not significant.

2.7 Robustness check

The results are robust to a number of sensitivity checks. First of all, I check whether I achieve similar results by modifying the cut-off age used to define exposure. To check for this, I increase the cut-off age for exposure to 18 and 20 years, respectively. The results are shown in Table 2.A.12 for spousal violence and the controlling behavior outcomes and in Tables 2.A.13, 2.A.14, and 2.A.15 for child-level outcomes. For family violence and controlling behavior outcomes, the size of each estimated coefficient decreases as I gradually increase the cutoff age to 18 and then to 20. For ages 0-18, many of my spousal violence variables (Table 2.A.12) are still significant but smaller compared to the cutoff age of 16; whereas none of them are statistically significant when I increase the age to 20. Tables 2.A.13 and 2.A.15 show that though smaller in magnitude, the estimated coefficients are similar in significance when the cutoff age is 18 but this significance disappears when age is increased to 20. This experiment shows that exposure during younger age has larger and more significant effects on adult behavioral outcomes that I study compared to exposure on later ages.

Endogenous mortality, fertility, and migration

One of the potential concerns about a causal interpretation of my estimates could be that of age-selective mortality and fertility. If only healthy and mentally strong children who may be less likely to be abusive in adulthood survive due to armed conflict, then positive selection might lead to overestimation of the true effects. Additionally, one might be concerned that the on-going civil war can affect the number of children born.

To assess age-selective mortality and fertility, I check for whether birth-cohort sizes vary with conflict intensity. I use the 2011 census for this analysis as this was the first census to be conducted after the war ended in 2006. It is also the first census to include information on individuals who were born between 1980 to 2006 and hence, were exposed to conflict at ages 0-16. Next, I collapse the data to the birth-year village/municipality level, i.e, for each village/municipality, I calculate the size[22] of each birth-year cohort in that particular location. If exposure to conflict affected mortality or fertility, we would expect to see effects on cohort size. I, therefore, regress the constructed panel of cohort size on my conflict exposure variable, controlling for location and birth-year fixed effects.[23] Table 2.A.16 reports the results for this regression. Panel A includes results for my entire sample irrespective of gender, whereas Panel B reports the results for men only. I do not find that exposure to conflict affected cohort sizes. The estimated coefficients are not only insignificant but also very small in magnitude compared to the means. This eliminates the concern that age-selective mortality or fertility is driving my results by affecting the sample composition.

As discussed earlier, armed-conflicts and wars often lead to dislocation and

[22]Size is calculated in terms of fraction, i.e., total number of individuals in a particular birth-year cohort to the total population of the village/municipality.

[23]The regression that I run is: $cohort_{tl} = \alpha_0 + \alpha_1 exposure_{tl} + \delta_l + \delta_t + \epsilon_{tl}$, where $cohort_{tl}$ is the fraction of birth-year(t) cohort size to the population in village/municipality (l), $exposure_{tl}$ is conflict exposure at ages between 0-16, δ_l is location fixed effect, and δ_t is birth-year fixed effect.

migration. Endogenous migration can affect the composition of my sample and hence, is a potential confounding factor. If highly exposed men, who are also more likely to be violent, migrate out due to conflict, then this would generate similar results as we observed for my outcome variables of interest. I have already attempted to address this issue of migration in Section 2.4.2. In addition to these assessments, following Singhal (2018), the birth-cohort size analysis performed above (Table 2.A.16) also tests for selective migration. As discussed above, I do not find that cohort sizes respond to conflict, suggesting that migration may not be biasing the results.

Multiple hypothesis testing

My analysis so far tests the effects of exposure to the adverse situation in childhood on multiple outcome variables on a one-by-one basis. However, this single inference procedure increases the probability of false positive[24] rate while testing multiple hypotheses simultaneously. One way to control for this effect is by controlling for Family-Wise Error Rate (FWER) which is the probability of making one or more false discoveries. This stringent approach, though widely used, has its own limitations like less power for testing each individual outcome. In this case a desirable error rate to control will be False Discovery Rate (FDR) or expected proportion of false discoveries.

Table 2.A.17 reports adjusted p-values of significant outcome variables where I control for both FWER and FDR. Columns [1] and [5] provide un-adjusted p-values use to conduct individual inferences. Columns [2] and [6] provide p-values adjusted for FWER using Holm (1979) step-up and Hochberg (1988) step-down procedures. Columns [3] and [7] provide p-values for Holm's method using Sidak's correction. Finally, Columns [4] and [8] provide p-values adjusted for FDR using Benjamini and Hochberg (1995) procedure. The estimates on child abuse

[24]False positive occurs when we reject the null hypothesis when it is in fact true.

and spousal partner violence and controlling behavior variables are robust to all corrections, including the most conservative ones. The result on hazardous labor is robust to all of these corrections for the rural sample.

2.8 Conclusion

Family violence is pervasive and has detrimental short-and long-run effects on physical and mental health, labor market and other outcomes of the victims. However, relatively less is known about what amplifies or curtails this behavior, particularly in the long-run. One of the potential long-run determinants can be exposure to an adverse situation like an armed conflict in childhood. Nevertheless, the causal effect of childhood experiences on later life perpetration of family violence remains largely unexplored and is a priori ambiguous. On the one hand, exposure to negative experiences in childhood may affect mental health, education, and labor market outcomes, which may introduce other stressors in adult life - this may increase the risk of perpetration of abuse and neglect against family members. On the other hand, the ability to cope with difficult situations early in life can make one fully appreciate family relationships and positively change one's attitude toward violent behavior.

This paper studies the impact of exposure to an adverse circumstance in childhood on adult life violent behavior toward family. In particular, I analyze the effects of men's exposure to armed conflict in childhood on the perpetration of family violence, for instance, spousal violence or child abuse, in adulthood. I explore this relationship in the context of the Nepalese Civil War (1996- 2006). For causal identification, I leverage two things: First, growing evidence in economics that age of exposure matters for later life behavior and second, the nature of the civil war itself. At a fixed-point in time during the civil war, various villages or municipalities of Nepal observed varying levels of conflict-related events.

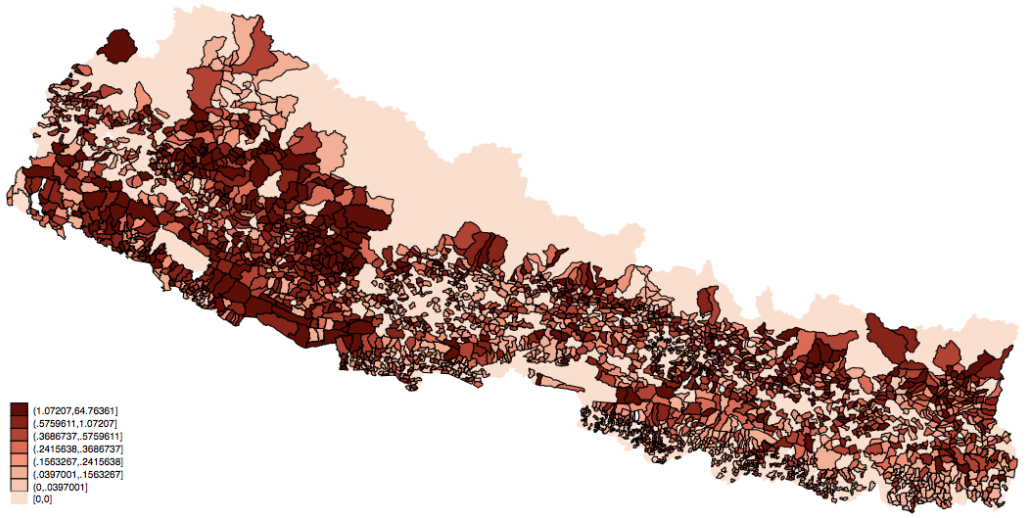
Likewise, a village or a municipality witnessed different levels of conflict-related events across different periods. Taken together, these facts allow me to construct a quasi-random natural experiment where I exploit geographical and temporal variation in conflict exposure from ages 0-16.

Perhaps surprisingly, I find that exposure to war as a boy, is associated with a less violent man. Firstly, I find that men who were exposed to armed conflict in childhood are less likely to perpetrate both physical and sexual forms of spousal violence. A one standard deviation increase in childhood conflict exposure decreases perpetration of less severe physical violence (like slapping, pulling hair, and so on) and severe physical violence (like kicking, dragging, hitting with objects) by roughly 9 and 35 percent of the sample mean, respectively. The drop is substantial for sexual spousal violence at approximately 62 percent of the sample mean. Secondly, exposed men are also less likely (by 22 percent of the sample mean) to display non-physical coercive behavior like exerting control over wife's social network or relationship with family and friends. Thirdly, a one standard deviation increase in father's conflict exposure decreases his child's probability of facing violent disciplining at home by 3-4 percent of the sample mean. Additionally, children of exposed fathers work fewer hours per week and are less likely to be involved in dangerous working conditions like carrying heavy loads.

To sum up, childhood experiences matter for later life preferences, and behavior. However, it also crucial to understand the underlying motives for family violence to inform policy. In my next chapter, I consider various channels driving the results observed above and explore other long-run outcomes of exposed men.

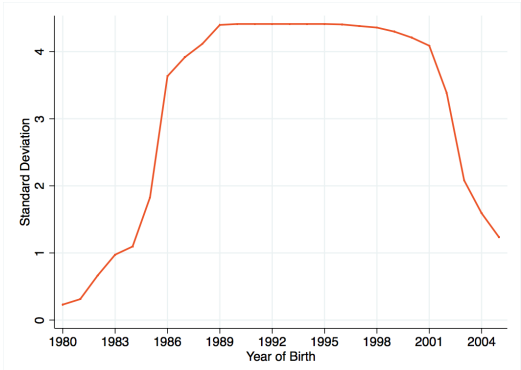
2.9 Figures

Figure 2.2: Temporal variation in conflict exposure at ages 0-16 across birth-year cohorts for each village or municipality



Notes: In the map above, for each administrative unit (VDCs or municipalities), I plot the standard deviation in men's conflict exposure from ages 0-16 across birth years. Darker shades represent higher variation. Conflict exposure (intensity) is measured as casualties/1000 population.

Figure 2.3: Spatial variation in conflict exposure at ages 0-16 for each birth-year cohort



Notes: In the graph above, for each birth year, I provide the standard deviation in conflict exposure from ages 0-16 across VDCs and municipalities. For this graph, I restrict birth year from 1980-2005 as these were the cohorts who experienced conflict at ages 0-16. Conflict exposure (intensity) is measured as casualties/1000 population.

2.10 Tables

Table 2.1: Summary Statistics (DHS)

	Mean	SD	N
Panel A: Intimate Partner Violence			
No. of reported acts of violence	0.933	2.178	1884
Ever experienced:			
𝟙(any emotional violence)	0.123	0.328	1884
𝟙(any less severe physical violence)	0.212	0.409	1884
𝟙(any severe physical violence)	0.0987	0.298	1884
𝟙(any sexual violence)	0.0775	0.267	1884
Panel B: Controlling Behavior			
Experienced:			
𝟙(jealousy/accusation of unfaithfulness)	0.217	0.412	1883
𝟙(control over social network)	0.155	0.362	1881
Panel C: Other Variables			
Age (Wife)	31.30	8.275	2422
Age (Husband)	34.81	8.279	2422
Wife's education (years)	4.346	4.307	2422
Husband's education (years)	6.467	3.840	2422
Household's size	5.764	3.046	2422
Wealth	2.966	1.386	2422
Rural location	0.855	0.352	2422

Notes: The table above provides mean and standard deviation for DHS (2016) data. Panel A reports the summary statistics for spousal violence. No. of reported acts of violence is a continuous variable and it is the total count of different individual acts of spousal violence (physical, sexual, or emotional) that a woman reported ever experiencing. There are 13 different acts of spousal violence. Refer to Table 2.A.1 to see the individual components of spousal violence variables. Panel B reports the summary statistics for controlling behavior displayed by husbands. Jealousy/accusation is an indicator for whether husband/partner constantly expresses jealousy or accuses of infidelity. Control over social network takes value 1 if the husband does not permit to meet or limits contact with friends, family, and relatives. Wealth in Panel C refers to asset based index calculated using Principal Component Analysis. In this case, it takes 5 values - with 1 being poorest and 5 being richest.

Table 2.2: Summary Statistics (MICS)

	Mean	SD	N
Panel A: Age 1-14			
In the past month experienced:			
𝟙(any physical abuse)	0.516	0.500	5375
𝟙(any psychological abuse)	0.310	0.462	5379
Panel B: Child Time Use & Work (Hours); Age 5-17			
In the past week, total hours worked in:			
all activities	12.4	17.1	5055
economic activities	4.7	8.9	5047
hours spent in fetching water or firewood	2.4	4.6	5047
domestic chores	5.3	7.3	5046
Panel C: Hazardous Child Labor; Age 5-17			
In the past week, involved in any activity that requires:			
carrying heavy loads	0.275	0.447	5038
working with dangerous tools or operating heavy machinery	0.0356	0.185	3650
Panel D: Other Variables; Age 1-17			
Age of the child	9.158	4.936	6606
Age rank of the child	1.834	1.100	6606
No. of children<17	2.430	1.358	6606
Age of the father	39.35	10.06	6606
Age of the mother	35.10	9.245	6556
Father's education (years)	8.186	6.382	4782
Mother's education (years)	7.780	4.963	2699
Wealth	2.581	1.483	6606
Household's size	5.552	2.167	6606
Female (child)	0.470	0.499	6606
Rural location	0.789	0.408	6606

Notes: The table above provides mean and standard deviation for MICS (2014) data. Panel A reports the summary statistics for physical and psychological abusive child disciplining in past month. Panel B reports the summary statistics for total hours that a child spent in various work activities outside/inside home in the past week. Panel C reports the summary statistics for hazardous child labor where each variable is an indicator for whether the child was involved in particular activity in past week. Wealth in Panel D refers to asset based index calculated using Principal Component Analysis. In this case, it takes 5 values - with 1 being poorest and 5 being richest.

Table 2.3: Summary Statistics: Conflict Exposure

	Mean	SD	Min	Max	N
Exposure Variable-Casualties/1000 population					
DHS					
Husband's exposure to conflict aged<16	0.411	1.927	0	45.40	2406
MICS					
Father's exposure to conflict aged<16	0.138	1.085	0	45.40	6606

Notes: The table above provides mean and standard deviation for conflict exposure for fathers in MICS (2014) and husbands in DHS (2016). Conflict exposure denotes a man's exposure to no. casualties/1000 population between ages 0-16.

Table 2.4: Effect of husband's childhood conflict exposure on wife's experience of intimate partner violence

	All Sample		Rural		All Sample		Rural	
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
	Panel A: No. of reported acts of IPV							
Conflict exposure	-0.209**	-0.201**	-0.210**	-0.202**				
	(0.084)	(0.087)	(0.086)	(0.090)				
Obs.	1678	1678	1475	1475				
Mean Outcome.	0.974	0.974	0.953	0.953				
	Panel B: Less severe physical violence				**Panel C: Severe physical violence**			
Conflict exposure	-0.023**	-0.021*	-0.023**	-0.020*	-0.019**	-0.019**	-0.018**	-0.018**
	(0.011)	(0.012)	(0.011)	(0.012)	(0.008)	(0.009)	(0.009)	(0.009)
Obs.	1678	1678	1475	1475	1678	1678	1475	1475
Mean Outcome.	0.224	0.224	0.221	0.221	0.105	0.105	0.103	0.103
	Panel D: Sexual violence				**Panel E: Emotional violence**			
Conflict exposure	-0.025***	-0.025***	-0.024***	-0.024**	-0.018	-0.016	-0.020*	-0.019
	(0.008)	(0.009)	(0.009)	(0.009)	(0.011)	(0.011)	(0.011)	(0.011)
Obs.	1678	1678	1475	1475	1678	1678	1475	1475
Mean Outcome.	0.078	0.078	0.074	0.074	0.127	0.127	0.125	0.125
Ethnicity FE	X	X	X	X	X	X	X	X
Year FE	X	X	X	X	X	X	X	X
Location FE	X	X	X	X	X	X	X	X
Region Trend		X		X		X		X

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (husband's) exposure to no. of casualties/1000 population between ages 0-16. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: woman's age, household's size, and wealth score. No. of reported acts of violence in Panel A is a continuous variable and it is the total count of different individual acts of spousal violence (physical, sexual, or emotional) that a woman reported ever experiencing. There are 13 different acts of spousal violence. The outcome variables in Panels B-E are indicators for if a woman ever experienced less severe physical, severe physical, sexual and emotional violence perpetrated by her spouse. The sample is restricted to women who were interviewed in the domestic violence module and whose husbands were interviewed in the men module and have lived in the same place for more than 10 years. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 2.5: Effect of husband's childhood conflict exposure on controlling behavior toward wife

	All Sample		Rural	
	[1]	[2]	[3]	[4]
	Panel A: Jealousy/ accusation of unfaithfulness			
Conflict exposure	-0.016	-0.017	-0.016	-0.017
	(0.013)	(0.013)	(0.013)	(0.013)
Obs.	1677	1677	1475	1475
Mean Outcome.	0.222	0.222	0.226	0.226
	Panel B: Control over social network			
Conflict exposure	-0.018**	-0.019**	-0.019*	-0.019*
	(0.009)	(0.010)	(0.010)	(0.010)
Obs.	1675	1675	1472	1472
Mean Outcome.	0.155	0.155	0.152	0.152
Ethnicity FE	X	X	X	X
Year FE	X	X	X	X
Location FE	X	X	X	X
Region Trend		X		X

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (husband's) exposure to no. of casualties/1000 population between ages 0-16. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: woman's age, household's size, and wealth score. Variable in Panel A is an indicator for whether husband/partner constantly expresses jealousy or accuses of infidelity . Variable in Panel B takes value 1 if husband does not permit to meet or limits contact with friends, family and relatives. The sample is restricted to women who were interviewed in the domestic violence module and whose husbands were interviewed in the men module and have lived in the same place for more than 10 years. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 2.6: Effect of father's childhood conflict exposure on abuse experienced by his child

	All Sample		Rural	
	[1]	[2]	[3]	[4]
	Panel A: Physical abuse			
Conflict exposure	-0.013**	-0.013**	-0.013**	-0.014**
	(0.006)	(0.006)	(0.006)	(0.006)
Obs.	5368	5368	4278	4278
Mean Outcome.	0.516	0.516	0.536	0.536
	Panel B: Psychological abuse			
Conflict exposure	-0.012**	-0.012**	-0.012**	-0.011**
	(0.005)	(0.005)	(0.005)	(0.005)
Obs.	5372	5372	4282	4282
Mean Outcome.	0.310	0.310	0.338	0.338
Ethnicity FE	X	X	X	X
Year FE	X	X	X	X
Location FE	X	X	X	X
Region Trend		X		X

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (father's) exposure to no. of casualties/1000 population between ages 0-16. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: gender, age and age ranking among resident siblings of the child, total number of children less than 17 years of age in the household, household's size, wealth score, and mother's age. Outcome variables in Panel A and B are indicators that take value 1 if the child selected for child discipline module in MICS was subjected to respective disciplining method in the household. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 2.7: Effect of father's childhood conflict exposure on his child's time use/work (hours)

	All	Rural	All	Rural
	[1]	[2]	[3]	[4]
	Panel A: Total hours worked		**Panel B: Hours in economic activity**	
Conflict exposure	-0.904*	-0.713	-0.513**	-0.470*
	(0.531)	(0.475)	(0.260)	(0.249)
Obs.	5005	3930	4997	3924
Mean Outcome.	12.413	14.221	4.708	5.470
	Panel C: Hours in fetching water/collecting firewood		**Panel D: Hours in domestic chores**	
Conflict exposure	-0.452**	-0.400**	-0.064	-0.001
	(0.183)	(0.174)	(0.295)	(0.292)
Obs.	4997	3924	4996	3923
Mean Outcome.	2.413	2.838	5.313	5.936
Additional Regressors: Year of Birth, Ethnicity & Location Fixed Effects: Controls				

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (father's) exposure to no. of casualties/1000 population between ages 0-16. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: gender, age and age ranking among resident siblings of the child, total number of children less than 17 years of age in the household, household's size, wealth score, and mother's age. Each outcome variable in Panels A-D is the total hours a child selected for MICS child labor module engaged in this specific activity pst week. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%,

Table 2.8: Effect of father's conflict exposure on his child's involvement in hazardous labor

	All Sample		Rural	
	[1]	[2]	[3]	[4]
	Panel A: Work requires carrying heavy loads			
Conflict exposure	-0.021*	-0.019	-0.022**	-0.020*
	(0.012)	(0.012)	(0.011)	(0.011)
Obs.	4989	4989	3918	3918
Mean Outcome.	0.275	0.275	0.322	0.322
	Panel B: Work requires working with dangerous tools/ operating heavy machinery			
Conflict exposure	-0.013	-0.010	-0.012	-0.009
	(0.016)	(0.016)	(0.016)	(0.015)
Obs.	3619	3619	2660	2660
Mean Outcome.	0.036	0.036	0.041	0.041
Ethnicity FE	X	X	X	X
Year FE	X	X	X	X
Location FE	X	X	X	X
Region Trend		X		X

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (father's) exposure to no. of casualties/1000 population between ages 0-16. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: gender, age and age ranking among resident siblings of the child, total number of children less than 17 years of age in the household, household's size, wealth score, and mother's age. Outcome variables in Panel A and B are indicators that take value 1 if the child selected for child labor module in MICS was engaged in respective activities in past week. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

APPENDIX

2.A Tables

Table 2.A.1: Construction of Variables (DHS)

Variable	**Components**
Less Severe Physical Violence=1	If husband ever, 1) pushed/shook or threw something at you 2) slapped you 3) twisted your arm/pulled hair 4)punched you with fist or something else
Severe Physical Violence=1	If husband ever, 1) kicked, dragged or beat you 2) tried to choke or burn you on purpose 3) threatened/attacked you with knife/gun/weapons
Emotional Violence=1	If husband ever, 1) say something to humiliate you infront of others 2) threaten to hurt/harm you or someone you care 3) insult or make you feel bad about yourself
Sexual Violence=1	If husband ever, 1) physically forced to have sexual intercourse 2) physically forced to perform any sexual acts 3)forced with threats/other ways to perform sexual acts

Table 2.A.2: Construction of Variables (MICS)

Variable	Components
Panel A: Child Discipline Module	
Physical abuse=1	If anyone in the household, 1) shook him/her 2) spanked, hit or slapped him/her on the bottom with bare hand 3) hit him/her on the bottom or elsewhere on the body with something like a belt, hairbrush, stick, or other hard object 4) hit or slapped him/her on the face, head, or ears 5) hit or slapped him/hand on the hand, arm, or leg 6) beat him/her up, that is hit him/her over and over as hard as one could
Psychological abuse=1 ‘	If anyone in the household, 1) called him/her dumb, lazy, or another name like that
Panel B: Child Labor Module	
Economic work=1	If since last week, the child 1) did any work or help on his/her own or the household's plot/farm/food garden or looked after animals 2) helped in family business or relative's business with or without pay, or run his/her own business 3) produced or sold articles, handicrafts, clothes, food or agricultural products 4) engaged in any other activity in return for income in cash or in kind, even for only one hours
Fetch water/collect firewood=1	If since last week, the child fetched water or collected firewood for household use
Domestic work=1	If since last week, the child 1) shopped for household 2) repaired any household equipment 3) cooked or cleaned utensils or the house 4) washed clothes 5) cared for children 6) cared for the old or sick 7) other household tasks
Cleaning=1	If since last week, the child 1) cooked or cleaned utensils or the house 2) washed clothes
Caring=1	If since last week, the child 1) cared for children 2) cared for the old or sick

Table 2.A.3: Summary Statistics: Outcomes and Controls (DHS)

	Full Sample			Rural		
	Mean	SE	N	Mean	SE	N
Panel A: Intimate Partner Violence						
No. of reported acts of violence	0.933	2.178	1884	0.918	2.152	1619
Ever Experienced:						
𝟙(any emotional violence)	0.123	0.328	1884	0.121	0.326	1619
𝟙(any less severe physical violence)	0.212	0.409	1884	0.211	0.408	1619
𝟙(any severe physical violence)	0.0987	0.298	1884	0.0994	0.299	1619
𝟙(any sexual violence)	0.0775	0.267	1884	0.0723	0.259	1619
Panel B: Controlling Behavior						
Experienced:						
𝟙(jealousy/accusation of unfaithfulness)	0.217	0.412	1883	0.221	0.415	1619
𝟙(control over social network)	0.155	0.362	1881	0.149	0.356	1616
Panel C: Other Variables						
Age (Wife)	31.30	8.275	2422	31.22	8.354	2071
Age (Husband)	34.81	8.279	2422	34.66	8.357	2071
Wife's education (years)	4.346	4.307	2422	4.072	2.230	2071
Husband's education (years)	6.467	3.840	2422	6.294	3.845	2071
Household's size	5.764	3.046	2422	5.834	3.107	2071
Wealth	2.966	1.386	2422	2.780	1.334	2071
Rural location	0.359	0.480	2422	0.417	0.493	2071
Panel D: Exposure Variable-Casualties/1000 population						
Husband's exposure to conflict aged<16	0.411	1.927	2406	0.472	2.074	2063

Notes: The table above provides mean and standard deviation for DHS (2016) data. Panel A reports the summary statistics for spousal violence. No. of reported acts of violence is a continuous variable and it is the total count of different individual acts of spousal violence (physical, sexual, or emotional) that a woman reported ever experiencing. There are 13 different acts of spousal violence. Refer to Table 2.A.1 to see the individual components of spousal violence variables. Panel B reports the summary statistics for controlling behavior displayed by husbands. Jealousy/accusation is an indicator for whether husband/partner constantly expresses jealousy or accuses of infidelity. Control over social network takes value 1 if the husband does not permit to meet or limits contact with friends, family, and relatives. Wealth in Panel C refers to asset based index calculated using Principal Component Analysis. In this case, it takes 5 values - with 1 being poorest and 5 being richest. Conflict exposure denotes a man's exposure to no. casualties/1000 population between ages 0-16.

Table 2.A.4: Summary Statistics: Outcomes and Controls (MICS)

	Full Sample			Rural		
	Mean	SE	N	Mean	SE	N
Panel A: Age 1-17						
In the past month experienced:						
𝟙(any physical abuse)	0.516	0.500	5375	0.536	0.499	4285
𝟙(any psychological abuse)	0.310	0.462	5379	0.338	0.473	4289
Panel B: Child Time Use & Work (Hours); Age 5-17						
In the past week, total hours worked in:						
all activities	12.4	17.1	5055	14.1	17.8	2345
economic activities	4.7	8.9	5047	4.8	8.9	2342
hours spent in fetching water or firewood	2.4	4.6	5047	2.7	4.8	2342
domestic chores	5.3	7.3	5046	6.6	7.9	2341
Panel C: Hazardous Child Labor; Age 5-17						
In the past week, involved in any activity that requires:						
carrying heavy loads	0.275	0.447	5038	0.322	0.467	3953
working with dangerous tools or operating heavy machinery	0.0356	0.185	3650	0.0411	0.198	2679
Panel C: Other Variables; Age 1-17						
Age of the child	9.158	4.936	6606	9.068	4.920	5212
Age rank of the child	1.834	1.100	6606	1.902	1.129	5212
No. of children<17	2.430	1.358	6606	2.554	1.382	5212
Age of the father	39.35	10.06	6606	39.47	10.43	5212
Age of the mother	35.10	9.245	6556	35.32	9.584	5176
Father's education (years)	8.186	6.382	4782	7.654	6.035	3586
Mother's education (years)	7.780	4.963	2699	7.227	5.517	1770
Wealth	2.581	1.483	6606	2.184	1.263	5212
Household's size	5.552	2.167	6606	5.680	2.160	5212
Female (child)	0.470	0.499	6606	0.484	0.500	5212
Rural location	0.789	0.408	6606	1	0	5212
Panel D: Exposure Variable-Casualties/1000 population						
Father's exposure to conflict aged<16	0.138	1.085	6606	0.163	1.210	5212

Notes: Panel A reports the summary statistics for physical and psychological abusive child disciplining in past month. Panel B reports the summary statistics for total hours that a child spent in various work activities outside/inside home in the past week. Panel C reports the summary statistics for hazardous child labor where each variable is an indicator for whether the child was involved in particular activity in past week. Wealth in Panel D refers to asset based index calculated using Principal Component Analysis. In this case, it takes 5 values - with 1 being poorest and 5 being richest. Conflict exposure denotes a man's exposure to no. casualties/1000 population between ages 0-16.

Table 2.A.5: Test of Selection on Observables

	Female [1]	Child's Age [2]	Child's Age Rank [3]	No. of Children <=17 [4]	Mother's Age [5]	Wealth Score [6]	HH Size [7]	Brahmin/ Chettri Hill [8]	Brahmin/ Chettri Terai [9]	Terai Middle Caste [10]	Dalit Hill [11]	Dalit Terai [12]	Newar [13]	Janjati Hill [14]	Janjati Terai [15]	Muslim [16]	Other [17]	Rural [18]	Wife's Age [19]
Panel A: Father's exposure to conflict at age<=16	-0.004	-0.025	-0.003	-0.020*	0.061	0.002	-0.033	-0.008	-0.001	0.001	0.001	-0.000	0.000	0.009	-0.002	-0.000	0.000	-0.001	
	(0.006)	(0.025)	(0.010)	(0.011)	(0.053)	(0.003)	(0.022)	(0.005)	(0.000)	(0.001)	(0.005)	(0.001)	(0.001)	(0.006)	(0.001)	(0.000)	(0.000)	(0.001)	
Obs.	6606	6606	6606	6606	6556	6606	6606	6606	6606	6606	6606	6606	6606	6606	6606	6606	6606	6606	
Mean Outcome.	0.470	9.158	1.834	2.430	35.103	-0.092	5.552	0.404	0.015	0.087	0.101	0.027	0.047	0.211	0.078	0.025	0.006	0.789	
Panel B: Husband's exposure to conflict at age<=16						-0.011	-0.017	-0.003	0.000	0.002	0.011	-0.001	0.002	-0.010	0.000	-0.001	0.000	-0.000	0.088***
						(0.010)	(0.118)	(0.004)	(0.000)	(0.001)	(0.008)	(0.001)	(0.002)	(0.009)	(0.001)	(0.001)	(0.000)	(0.000)	(0.027)
Obs.						2406	2406	2406	2406	2406	2406	2406	2406	2406	2406	2406	2406	2406	2406
Mean Outcome.						2.966	5.764	0.309	0.014	0.132	0.085	0.039	0.035	0.200	0.141	0.041	0.004	0.359	31.305
Panel C: Man's exposure to conflict at age<=16 (DHS Sample)						-0.005	0.031	-0.000	0.000	0.001	0.008*	-0.000	0.001	-0.008	-0.000	-0.000	0.000	-0.000	0.089***
						(0.005)	(0.019)	(0.002)	(0.000)	(0.001)	(0.005)	(0.000)	(0.001)	(0.005)	(0.001)	(0.001)	(0.000)	(0.000)	(0.028)
Obs.						4036	4036	4036	4036	4036	4036	4036	4036	4036	4036	4036	4036	4036	2672
Mean Outcome.						3.039	5.607	0.322	0.013	0.127	0.086	0.036	0.039	0.205	0.124	0.046	0.004	0.344	31.189
Panel D: Man's exposure to conflict at age<=16 (MICS Sample)						0.001	0.019	-0.004*	0.000	0.001	-0.000	0.000	0.001*	0.002	-0.000	-0.001	-0.000	-0.000	-0.003
						(0.003)	(0.017)	(0.002)	(0.000)	(0.001)	(0.002)	(0.000)	(0.001)	(0.003)	(0.001)	(0.001)	(0.000)	(0.000)	(0.029)
Obs.						12578	12578	12578	12578	12578	12578	12578	12578	12578	12578	12578	12578	12578	7082
Mean Outcome.						0.072	5.685	0.399	0.015	0.091	0.090	0.025	0.055	0.202	0.089	0.027	0.007	0.744	32.096
Fixed Effects: Year & Location																			

Notes: *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance. Standard errors are clustered by VDC or municipality of birth. **Each cell represents result from different regression.** The results are estimated using OLS. Each panel tests for the effects of conflict exposure variables that I use in this study on observables. Conflict exposure for each panel is measured at total number of casualties per thousand population.

Table 2.A.6: Effect of husband's conflict exposure on wife's experience of less severe physical violence

	All Sample [1]	Rural [2]	All Sample [3]	Rural [4]
	Panel A: Pushed/ shook/ threw sth at you		**Panel B: Slapped you**	
Conflict exposure	-0.016	-0.016	-0.031***	-0.030***
	(0.011)	(0.011)	(0.007)	(0.008)
Obs.	1678	1475	1678	1475
Mean Outcome.	0.115	0.114	0.201	0.200
	Panel C: Twisted arm/ pulled hair		**Panel D: Punched you with fist or sth else**	
Conflict exposure	-0.019**	-0.020**	-0.018**	-0.018**
	(0.008)	(0.008)	(0.007)	(0.007)
Obs.	1678	1475	1678	1475
Mean Outcome.	0.094	0.095	0.084	0.083
Additional Regressors: Year of Birth, Ethnicity & Location Fixed Effects: Controls				

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (husband's) exposure to no. of casualties/1000 population between ages 0-16. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The outcome variables in Panels A-D are indicators for if a woman ever experienced specified type of less severe physical violence perpetrated by her spouse. The sample is restricted to women who were interviewed in the domestic violence module and whose husbands were interviewed in the men module and have lived in the same place for more than 10 years. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 2.A.7: Effect of husband's conflict exposure on wife's experience of severe physical violence

	All Sample [1]	Rural [2]	All Sample [3]	Rural [4]
	Panel A: Kicked/ dragged/ beat you		**Panel B: Tried to choke/ burn you on purpose**	
Conflict exposure	-0.025***	-0.024***	-0.011	-0.012
	(0.008)	(0.009)	(0.009)	(0.009)
Obs.	1678	1475	1678	1475
Mean Outcome.	0.100	0.098	0.032	0.030
	Panel C: Threatened/ attacked you with knife or gun			
Conflict exposure	-0.004	-0.004		
	(0.012)	(0.012)		
Obs.	1678	1475		
Mean Outcome.	0.016	0.017		
Additional Regressors: Year of Birth, Ethnicity & Location Fixed Effects: Controls				

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (husband's) exposure to no. of casualties/1000 population between ages 0-16. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The outcome variables in Panels A-C are indicators for if a woman ever experienced specified type of severe physical violence perpetrated by her spouse. The sample is restricted to women who were interviewed in the domestic violence module and whose husbands were interviewed in the men module and have lived in the same place for more than 10 years. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 2.A.8: Effect of husband's conflict exposure on wife's experience of sexual violence

	All Sample [1]	Rural [2]	All Sample [3]	Rural [4]
	Panel A: Physically forced to intercourse		**Panel B: Physically forced to perform sexual acts**	
Conflict exposure	-0.023***	-0.022**	-0.004	-0.003
	(0.008)	(0.009)	(0.003)	(0.003)
Obs.	1678	1475	1678	1475
Mean Outcome.	0.072	0.068	0.036	0.031
	Panel C: Forced with threat to sexual acts			
Conflict exposure	-0.013*	-0.013		
	(0.008)	(0.008)		
Obs.	1678	1475		
Mean Outcome.	0.027	0.026		
Additional Regressors: Year of Birth, Ethnicity & Location Fixed Effects: Controls				

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (husband's) exposure to no. of casualties/1000 population between ages 0-16. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The outcome variables in Panels A-C are indicators for if a woman ever experienced specified type of sexual violence perpetrated by her spouse. The sample is restricted to women who were interviewed in the domestic violence module and whose husbands were interviewed in the men module and have lived in the same place for more than 10 years. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 2.A.9: Effect of husband's conflict exposure on wife's experience of emotional violence

	All Sample [1]	Rural [2]	All Sample [3]	Rural [4]
	Panel A: Say sth to humiliate infront of others		**Panel B: Threaten to hurt you or someone you care**	
Conflict exposure	-0.023***	-0.025***	-0.012	-0.012
	(0.008)	(0.008)	(0.008)	(0.008)
Obs.	1678	1475	1678	1475
Mean Outcome.	0.070	0.065	0.045	0.043
	Panel C: Insult/make you feel bad about yourself			
Conflict exposure	-0.009	-0.011		
	(0.011)	(0.011)		
Obs.	1678	1475		
Mean Outcome.	0.083	0.082		
Additional Regressors: Year of Birth, Ethnicity & Location Fixed Effects: Controls				

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (husband's) exposure to no. of casualties/1000 population between ages 0-16. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The outcome variables in Panels A-C are indicators for if a woman ever experienced specified type of emotional violence perpetrated by her spouse. The sample is restricted to women who were interviewed in the domestic violence module and whose husbands were interviewed in the men module and have lived in the same place for more than 10 years. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 2.A.10: Effect of father's childhood conflict exposure on abuse experienced by his child

	All Sample [1]	Rural [2]	All Sample [3]	Rural [4]
	Panel A: Constructive discipline		**Panel B: Shouted/Yelled**	
Conflict exposure	0.001	0.002	-0.003	-0.002
	(0.005)	(0.005)	(0.005)	(0.005)
Obs.	5379	4287	5378	4287
Mean Outcome.	0.911	0.914	0.740	0.757
Additional Regressors: Year of Birth, Ethnicity & Location Fixed Effects: Controls				

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (father's) exposure to no. of casualties/1000 population between ages 0-16. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: gender, age and age ranking among resident siblings of the child, total number of children less than 17 years of age in the household, household's size, wealth score, and mother's age. Outcome variables in Panel A and B are indicators of whether the child selected for child discipline module in MICS was subjected to respective disciplining method in the household. Constructive discipline in Panel A takes value 1 if disciplining the child involved taking away privileges, explaining wrong behavior or giving him/her something else to do. Shouted/yelled in Panel B takes value 1 if the child was shouted or yelled. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 2.A.11: Effect of husband's conflict exposure on wife's experience of intimate partner violence

	All Sample [1]	Rural [2]	All Sample [3]	Rural [4]	All Sample [5]	Rural [6]
Conflict exposure at age	**Panel A: No. of reported acts of IPV**		**Panel B: Less severe physical violence**		**Panel C: Severe physical violence**	
<=18	-0.070*	-0.072*	-0.011*	-0.011*	-0.008*	-0.008*
	(0.040)	(0.040)	(0.006)	(0.006)	(0.005)	(0.005)
<=20	-0.057*	-0.059*	-0.010*	-0.009*	-0.006	-0.006
	(0.034)	(0.034)	(0.006)	(0.006)	(0.004)	(0.004)
Obs.	1678	1475	1678	1475	1678	1475
Mean Outcome.	0.974		0.224	0.221	0.105	0.103
Conflict exposure at age	**Panel D: Sexual violence**		**Panel E: Emotional violence**			
<=18	-0.009	-0.008	-0.013*	-0.014*		
	(0.007)	(0.007)	(0.007)	(0.008)		
<=20	-0.008	-0.007	-0.012*	-0.013**		
	(0.007)	(0.006)	(0.006)	(0.007)		
Obs.	1678	1475	1678	1475		
Mean Outcome.	0.078	0.074	0.127	0.125		
Additional Regressors: Year of Birth,Ethnicity & Location Fixed Effects: Controls						

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (husband's) exposure to no. of casualties/1000 population between ages 0-18 and 0-20, respectively. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: woman's age, household's size, and wealth score. No. of reported acts of violence in Panel A is a continuous variable and it is the total count of different individual acts of spousal violence (physical, sexual, or emotional) that a woman reported ever experiencing. There are 13 different acts of spousal violence. The outcome variables in Panels B-E are indicators for if a woman ever experienced less severe physical, severe physical, sexual, and emotional violence perpetrated by her spouse. The sample is restricted to women who were interviewed in the domestic violence module and whose husbands were interviewed in the men module and have lived in the same place for more than 10 years. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 2.A.12: Effect of husband's conflict exposure on wife's experience of controlling behavior

	All Sample [1]	Rural [2]	All Sample [3]	Rural [4]
Conflict exposure at age	**Panel A: Any controlling behavior**		**Panel B: Control over social network**	
multicolumn5c				
<=18	-0.000	-0.000	-0.007	-0.008
	(0.007)	(0.007)	(0.006)	(0.007)
<=20	-0.001	-0.002	-0.007	-0.007
	(0.007)	(0.007)	(0.006)	(0.006)
Obs.	1678	1475	1675	1472
Mean Outcome.	0.326	0.326	0.155	0.152
Additional Regressors: Year of Birth,Ethnicity & Location Fixed Effects: Controls				

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (husband's) exposure to no. of casualties/1000 population between ages 0-18 and 0-20, respectively. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: woman's age, household's size, and wealth score. Panel A is an indicator for whether husband/partner expresses jealousy, accuses of infidelity, does not permit to meet family and friends and insists on knowing where the woman is at all times. Variable in Panel B takes value 1 if husband does not permit to meet or limits contact with friends, family, and relatives. The sample is restricted to women who were interviewed in the domestic violence module and whose husbands were interviewed in the men module and have lived in the same place for more than 10 years. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 2.A.13: Effect of father's childhood conflict exposure on abuse experienced by his child

	All Sample [1]	Rural [2]	All Sample [3]	Rural [4]
Conflict exposure at age:	**Panel A: Physical abuse**		**Panel B: Psychological abuse**	
<=18	-0.012**	-0.012**	-0.009**	-0.009**
	(0.005)	(0.005)	(0.004)	(0.004)
<=20	-0.006	-0.006	-0.004	-0.003
	(0.004)	(0.004)	(0.003)	(0.003)
Obs.	5368	4278	5372	4282
Mean Outcome.	0.516	0.536	0.310	0.338
Additional Regressors: Year of Birth, Ethnicity & Location Fixed Effects: Controls				

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (father's) exposure to no. of casualties/1000 population between ages 0-18 and 0-20, respectively. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: gender, age and age ranking among resident siblings of the child, total number of children less than 17 years of age in the household, household's size, wealth score, and mother's age. Outcome variables in Panel A and B are indicators that take value 1 if the child selected for child discipline module in MICS was subjected to respective disciplining method in the household. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 2.A.14: Effect of father's childhood conflict exposure on child's involvement in hazardous labor

	All Sample [1]	Rural [2]	All Sample [3]	Rural [4]
Conflict exposure at age	**Panel A: Work requires carrying heavy loads**		**Panel B: Work requires working with dangerous tools/ operating heavy machinery**	
<=18	-0.013	-0.011	-0.009	-0.008
	(0.008)	(0.008)	(0.008)	(0.008)
<=20	-0.014***	-0.012***	-0.001	-0.000
	(0.003)	(0.003)	(0.003)	(0.003)
Obs.	4989	3918	3619	2660
Mean Outcome.	0.275	0.322	0.036	0.041
Additional Regressors: Year of Birth, Ethnicity & Location Fixed Effects: Controls				

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (father's) exposure to no. of casualties/1000 population between ages 0-18 and 0-20, respectively. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: gender, age and age ranking among resident siblings of the child, total number of children less than 17 years of age in the household, household's size, wealth score, and mother's age. Outcome variables in Panel A and B are indicators that take value 1 if the child selected for child labor module in MICS was engaged in respective activities in past week. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 2.A.15: Effect of father's childhood conflict exposure on his child's time use/work (hours)

	All	Rural	All	Rural
	[1]	[2]	[3]	[4]
	Panel A: Total hours worked		**Panel B: Hours in economic activity**	
<=18	-0.765**	-0.592*	-0.452***	-0.394**
	(0.347)	(0.323)	(0.172)	(0.169)
<=20	-0.320*	-0.237*	-0.172*	-0.139*
	(0.168)	(0.136)	(0.091)	(0.080)
Obs.	5005	3930	4997	3924
Mean Outcome.	12.413	14.221	4.708	5.470
	Panel C: Hours in fetching water/collecting firewood		**Panel D: Hours in domestic chores**	
<=18	-0.255*	-0.211	-0.106	-0.048
	(0.142)	(0.138)	(0.161)	(0.159)
<=20	-0.109*	-0.087	-0.045	-0.020
	(0.062)	(0.053)	(0.046)	(0.041)
Obs.	4997	3924	4996	3923
Mean Outcome.	2.413	2.838	5.313	5.936
Additional Regressors: Year of Birth, Ethnicity & Location Fixed Effects: Controls				

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (husband's) exposure to no. of casualties/1000 population between ages 0-18 and 0-20, respectively. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: gender, age and age ranking among resident siblings of the child, total number of children less than 17 years of age in the household, household's size, wealth score, and mother's age. Each outcome variable in Panels A-D is the total hours a child selected for MICS child labor module engaged in this specific activity past week. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%,

Table 2.A.16: Exposure to conflict and cohort composition

	All Sample [1]	Rural [2]	Urban [3]
	Panel A: Cohort fraction		
Conflict exposure	0.000017	0.000017	0.001631
	(0.000022)	(0.000023)	(0.001100)
Obs.	106098	104532	1566
Mean Outcome.	0.021	0.021	0.021
	Panel B: Male cohort fraction		
Conflict exposure	-0.000024	-0.000023	0.002595
	(0.000017)	(0.000017)	(0.001733)
Obs.	100588	99022	1566
Mean Outcome.	0.021	0.021	0.021

Notes: The table above reports the estimated coefficients from regression of birth-year cohort sizes (in fractions) on conflict exposure. Conflict exposure denotes each birth year exposure to no. of casualties/1000 population between ages 0-16, respectively. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. All regressions include cohort and location fixed effects. Each outcome variable is a fraction of birth-year cohort size to total observed population in a location. Panel A includes overall birth-year cohort size irrespective of gender whereas Panel B includes birth-year cohort size for male only. These regressions use the 2011 census, restricting to birth years 1980-2006. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 2.A.17: Multiple Hypothesis Testing

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
	Panel A: Full Sample				Panel B: Rural			
	Unadjusted	Holm or Hochberg	Holm-Sidak	Benjamin & Hochberg	Unadjusted	Holm or Hochberg	Holm-Sidak	Benjamin & Hochberg
Physical abuse	0.0166	0.0662	0.0646	0.0662	0.0166	0.0662	0.0646	0.0662
Psychological abuse	0.0314	0.0943	0.0914	0.0629	0.0314	0.0943	0.0914	0.0629
Work requires carrying heavy loads	0.0806	0.1612	0.1547	0.1612	0.0474	0.0949	0.0926	0.0949
	Panel C: Full Sample				Panel D: Rural			
	Unadjusted	Holm or Hochberg	Holm-Sidak	Benjamin & Hochberg	Unadjusted	Holm or Hochberg	Holm-Sidak	Benjamin & Hochberg
No. of reported acts of IPV	0.0132	0.0528	0.0517	0.0330	0.0149	0.0596	0.0583	0.0372
Less severe physical violence	0.0424	0.0848	0.0830	0.0530	0.0459	0.0918	0.0897	0.0574
Severe physical violence	0.0281	0.0844	0.0821	0.0469	0.0415	0.1244	0.1193	0.0691
Sexual violence	0.0040	0.0202	0.0200	0.0202	0.0083	0.0413	0.0406	0.0413
Emotional violence	0.1025	0.1025	0.1025	0.1025	0.0754	0.0754	0.0754	0.0754
Control over social network	0.0490	0.0981	0.0957	0.0981	0.0593	0.1186	0.1151	0.1186

This table provides results for multiple hypothesis testing for significant variables in Tables 2.6, 3.6, 2.8 and 2.4. Holm or Hochberg refers to Family Wise Error Rate (FWER) adjusted p-values using Holm's step down procedure (1979) and Hochberg's step-up procedure (1988) which yield same p-values. Holm-Sidak is also FWER adjusted p-value where Sidak correction is applied to Holm's method. Benjamin & Hochberg (1995) is a step-down procedure that corrects for False Discovery Rate (FDR).

CHAPTER 3

EXPLORING THE CHANNELS

3.1 Introduction

Chapter 2 investigated the long-run relationship between exposure to an armed conflict in childhood and later-life perpetration of abuse and neglect against family members in adulthood. The results suggest that exposure to conflict-related events in childhood has a lasting impact on adult violent behavior. In particular, an increase in childhood conflict exposure leads to a decline in the likelihood of perpetrating violence and abuse against family members. This chapter delves deeper into the topic to find the mechanisms that underlie these empirical results.

I explore other dimensions of men's lives like educational, labor market, and marriage market outcomes. Education can directly change an individual's beliefs on family violence or can also affect labor market outcomes which can then impact domestic violence or child labor outcomes (Erten and Keskin, 2017). Likewise, marriage market outcomes can determine women's bargaining power within the household. If exposed men are also more likely to marry women who oppose any form of family violence, we are more likely to observe a decline in the perpetration of spousal violence. Additionally, a decrease in marital conflict due to assortative matching can induce parents to be less abusive toward their children. Another potential channel can be the change in attitude toward family violence due to exposure to an adverse circumstance in childhood. Tedeschi and Calhoun (2004) argue that the ability to cope with difficult situations early in like can make

one fully appreciate family relationships and change one's attitude toward violent behavior. As a consequence of which, we can witness a lower perpetration of abuse against family members in adulthood.

To identify the causal channels, I exploit spatial and temporal variation in men's childhood exposure to armed conflict at the village or municipality level. To construct the childhood exposure variable, I take advantage of the information on the exact month and the year of birth of individuals and the dates of conflict-related events at the local level. Intuitively, I exploit the fact that individuals born in the same month and year but in different localities were exposed to varying intensities of armed-conflict. Likewise, those born in the same locality but in different months and years were also exposed to conflict differentially. As in Chapter 2, conflict exposure is defined as the number of victims per thousand population in a village or a municipality from ages 0-16.

I find that men who are exposed to conflict during ages 0-16 are more likely to be educated, to have completed secondary schooling, and to be currently employed in skilled non-agricultural occupations. They are also more likely to marry women of similar age and their partners are more likely to have completed primary education. The most pertinent channel is the change in attitude toward violence brought by the experience of armed-conflict in childhood. Exposed men are less likely to say that wife-beating is justified in different situations. In other words, exposure to a conflict environment in childhood might develop dis-taste for using violence at home in later life. These results suggest that educational, economic, and marriage market outcomes along with a change in attitude/beliefs are all plausible explanations for my findings on family violence.

My results on the causal channels are as surprising as the results on family violence outcomes in Chapter 2. The sustained positive effects of childhood conflict exposure on attitudes along with long-run educational and economic outcomes

are on, first glance, counter-intuitive. Existing literature in economics, in fact, documents negative effects of exposure to armed conflict on educational and labor market outcomes (Akresh, 2008; Annan et al., 2011). However, psychology literature suggests two potential reasons why we might observe the positive developments in educational, occupational, and attitude outcomes. Firstly, "resilience" allows at-risk individuals to "bounce-back" or achieve better outcomes in situations where adverse results would be normally expected (Luthar et al., 2000). Secondly, challenging circumstances early in life can lead to "post-traumatic growth" which often involves recognizing new possibilities, appreciating family and intimate relationships (Tedeschi and Calhoun, 2004).

Next, I assess what the results on family violence and the channels imply about theories of domestic violence. Existing theories highlight two broader motives for perpetrating domestic violence: "Expressive" and "Instrumental". Violence is instrumental if it is used to extract resources from the victim whereas it is expressive if the perpetrator gains direct non-pecuniary (dis)utility from it. A special case of instrumental violence is the traditional model of household bargaining (Aizer, 2010) which argues that an improvement in one's bargaining power within the household reduces the chances of experiencing domestic violence.

I start by exploring whether my empirical results support the instrumental theories on domestic violence. Firstly, I do not find any significant effect of conflict exposure on the wife's bargaining power within the household. Secondly, I find that wives of exposed men are more likely to work. This suggests that there are greater incentives for men to use domestic violence to extract resources from working wives. However, I find these men to be less violent, both physically and sexually. Therefore, the evidence supporting instrumental theories of domestic violence is very weak in this case. Nevertheless, I am unable to completely rule out the instrumental motives - the reason being that, I also find exposed men

are more likely to work which might it unnecessary to use violence to extract resources from wives. My results on family violence are, however, consistent with the expressive theories of domestic violence where men develop dis-taste for perpetrating such behaviors. This argument is strengthened by the observed drop in the perpetration of more expressive forms of abuse like sexual violence and the positive change in men's attitude toward domestic violence.

Related literature and contribution

This study is closely related to the literature in economics that explores "early life" shocks and the formation of later life preferences and attitude. Evidence from child-soldiering shows that childhood exposure to violence alters political beliefs and increases political participation and community engagement later on (Blattman, 2009; Adhvaryu et al., 2014). Additionally, girls abducted into combating displayed high resilience and less aggressive social behavior later on despite experiencing high psychological distress (Annan et al., 2011). However, evidence on the effects of "early life" shocks on beliefs and attitude is mixed. Women who were exposed to armed conflict in their childhood are more likely to normalize the use of aggressive behavior by their partners(Mattina and Shemyakina, 2017).

This chapter complements previous studies on the role of early life shocks in the formation of later life preferences and beliefs by providing evidence for positive change in attitudes toward domestic violence. Additionally, unlike current literature that studies armed-conflict and domestic violence, I find that conflict exposure can reduce domestic violence if the potential perpetrator develops a distaste for it. While doing so, I also provide empirical evidence for the theoretical literature on intimate partner violence (Tauchen et al., 1991; Haushofer et al., 2019) by determining underlying motives for domestic violence to be expressive.

The second strand of literature this chapter contributes to is the research on the long-run effects of exposure to conflict or war on measures of human capital.

Recent studies have documented that childhood exposure to armed conflict disrupts schooling which has negative effects on educational achievements (Akresh, 2008; Shemyakina, 2011) and later life labor market outcomes (Blattman and Annan, 2010; Annan et al., 2011). Additionally, exposure to war as a child has a detrimental effect on adult health in terms of reduced stature (Akresh et al., 2012a), higher Body-Mass Index (BMI), elevated incidence of chronic health conditions (Akbulut-Yuksel, 2017), and increased psychological and mental distress (Singhal, 2018). On the contrary, my results show that exposed children were more likely to complete secondary schooling and marry women of their age in the long-run. I, therefore, add to this literature by highlighting the potential role of resilience which allows exposed individuals to catch up to or have better outcomes than their non-exposed counterparts in the long run.

Finally, this chapter also relates to the first chapter of this dissertation. In Chapter 1, we find that, in the short-run, periods of heightened conflict have negative effects on the time allocated to work and education of boys. The short-run results are consistent with the literature on the effects of violence on child-level outcomes. However, Chapter 3 shows that the negative short-run effects on boys get more than compensated in the long run which by itself is a unique result.

The rest of the chapter is organized as follows. In Section 3.2, I discuss the main data sources that I use in this chapter. Section 3.3 lays out the empirical strategy and Section 3.4 presents. Section 3.6 concludes the chapter.

3.2 Data

To calculate childhood conflict exposure for men, I use the same Informal Sector Service Center's (INSEC) data on victims from the Nepalese Civil War (1996-2006) as Chapter 2.[1] The other data that I use to explore potential mechanisms

[1]Refer to Section 2.3.1 for further details on the microdata on civil war.

for results on family violence are described in sections below.

3.2.1 Data on potential causal channels

Demographic and Health Survey (DHS) data

To study the effects of childhood conflict exposure on long-run educational, economic, and marriage market outcomes, I use the DHS-2016 survey. I use the *Male Recode* of the DHS that includes information on men who were surveyed under the Man's Questionnaire. This questionnaire was administered to all men age 15-49 in the subsample of households selected for the survey. The Man's Questionnaire collected information on background characteristics including the month and the year of birth. Additionally, male respondents were asked if they agree that a husband is justified in hitting or beating his wife under various circumstances to measure attitudes toward domestic violence.

A subsample of men under Male Recode can be matched to their respective spouses who were surveyed under the Woman's Questionnaire. This matched data-set allows me to understand the effect of man's childhood exposure on his marriage market outcomes. Additionally, since women respondents were also asked the same questions on attitudes toward domestic violence, I can also check for whether exposed men are matched to partners with certain attitudes toward domestic violence. To measure empowerment, DHS also asked women respondents a series of questions on their participation in making household decisions. Therefore, the matched-data set also allows me to study decision-making outcomes between a husband and a wife.

Multiple Indicator Cluster Survey (MICS)

To bolster the results from the DHS survey, I also use data from the Multiple Indicator Cluster Survey, 2014. This is a cross-sectional survey designed to assess the situation of children and women in Nepal and also covers a range of household

characteristics including asset ownership. The Household Questionnaires includes information on the birth and the year of month, and education of the household members along with other household characteristics. The survey also administered a separate questionnaire to all women aged 15-49 which included modules on attitudes toward domestic violence.

Population Census of Nepal

In addition, I use the 2011 wave of Nepal's national population census to access local level birth cohorts size. In order to weight the number of victims by village(or municipality) level population, I use the census wave of 2001.

3.3 Empirical Methodology

In this chapter, I exploit the same spatial and temporal variation in men's childhood conflict exposure as in Chapter 2. To do so, I take advantage of the information on the exact month and the year of birth of individuals and the dates of conflict-related events at the village or municipality level. This information allows me to construct more precisely how much conflict an individual was exposed to up to the age of 16. To sum up, my empirical strategy is to exploit the fact that the men born in the same month and year but in different localities were exposed to varying intensities of armed- conflict. Likewise, those born in the same locality but in different months and years were also exposed to conflict differentially. I define childhood conflict exposure as victims per 1000 population in a village or municipality up to the age of 16.

To formally examine the effects of conflict exposure in childhood, I estimate the following specification:

$$M_{imtl} = \alpha + \beta \text{ exposure}_{imtl} + \theta^{'} X_i + \delta_l + \gamma_t + \varepsilon_{imtl} \tag{3.1}$$

where M_{ijmtl} is an outcome variable for a man, i, who was born in month m of year t and is living in location l at the time of the survey. Here, l can be a village or a municipality which is Nepal's second-lowest administrative units. The main variable of interest, $exposure_{imtl}$, is exposure to conflict, which is measured as the number of casualties per thousand population in location l when i was between ages 0 to 16. X_i is the set of household level controls like household size, wealth score, and dummies for ethnicity variables.

The coefficient of interest, β, measures the effect of a unit increase in conflict exposure on the outcome variable of interest. ε_{imtl} is the error term of the regression model. β is identified under the assumption that the treatment variable, $exposure_{imtl}$, is not correlated to the unobservables in the error term (ϵ_{imtl}). Some localities have certain unobservable characteristics, like forest density, that might make them more prone to guerrilla warfare. To control for such unobservable location-specific characteristics, I include location fixed effects (δ_l). Likewise, I also include fixed effects for man's year of birth (γ_t) which controls for non-linear time trends. In other words, γ_t controls for location-invariant unobservable characteristics like attitudes, beliefs or norms common to individuals born in the same year. Finally, I estimate all regressions using Ordinary Least Squares (OLS) and cluster standard errors at the village or municipality level.

3.4 Results

3.4.1 Education and labor market outcomes

Education can directly change an individual's beliefs on family violence or can also affect labor market outcomes which can then impact domestic violence or child labor outcomes (Erten and Keskin, 2017). Unemployment and economic hardship has been found to increase both spousal violence and child abuse (Schneider et al.,

2016, 2017). If exposure to conflict in childhood had a significant impact on long-run educational outcomes which then affected the economic conditions of men, this could, in turn, affect the perpetration of violent behavior toward family.

I estimate if exposure to conflict at age less than 16 had any effect on male educational attainment. The results are presented in Table 3.1. The outcome variable in Panel A is years of education, and to study effects on long-run education, I limit my sample to men aged 20 to 49 at the time of the survey. An increase in experience of conflict intensity in childhood has a positive impact on total years of education in both DHS and MICS surveys. The magnitude of coefficients is 0.058 for DHS (Column [1]) and 0.073 (Column [3]) for MICS which is small compared to the sample mean of 6.73 and 7.19, respectively. The impact is more significant and larger in size (compared to the sample mean) for the probability of completing secondary education for exposed men as seen in Panel B. As the standard age to complete secondary education in Nepal is of 16 years, I include those men who are of age 18 or above in my sample. The coefficients are positive and significant for both DHS and MICS samples, though smaller in magnitude for the latter one.

There are two potential explanations for this surprising positive effect on long-run male educational attainment. Firstly, as borrowed from the psychology literature, is the concept of “resilience". It refers to a dynamic process of achieving positive adaptation despite major assaults on the developmental process due to being exposed to a significant threat or severe adversity in childhood (Luthar et al., 2000). That is, it allows at-risk individuals to achieve positively valued outcomes in situations where adverse results would be normally expected due to negative circumstances faced by them. In other words, resilience is the ability to “bounce back". Positive outcomes despite adverse experiences are not unique to Nepal’s civil war. After World-War II, getting good education and jobs was a

way to make up for the lost ground for the affected Japanese population (Nagata and Takeshita, 1998). However, many empirical studies also argue that positive outcomes are stronger where cultural values like family ties, religion, and faith, that form the bedrock of resilience are embodied strongly among the affected population (Eggerman and Panter-Brick, 2010). Secondly, parents might have invested more in the education of children who were adversely affected by war or there might have been more local level post-war educational investment in areas affected by war.

I also check whether exposure to conflict in childhood had a significant impact on labor market outcomes. If resilience allowed exposed men to achieve better educational outcomes, they might also have observed higher probability of finding jobs. If true, improved labor market outcomes can translate to better financial situations at home and increased ability to respond to wife and children's needs. Lower stress due to work opportunities can reduce the use of violence against family members. I find that men who were exposed in childhood are more likely to be employed in skilled non-agricultural work (Panel D). The estimated coefficient is positive but not significant for the rural DHS sample.

Overall, these findings imply that men who were exposed to conflict in childhood are more likely to be educated, complete secondary schooling, and employed in skilled non-agricultural jobs. As a result, these men are more likely to have financial security along with better awareness about the negative impacts of family violence. I interpret these findings as evidence for adult-life education and labor market outcomes as channels for the estimated impacts of conflict exposure on family violence.

3.4.2 Attitude toward violent behavior

To explore further potential mechanisms, I investigate if exposure to adverse situations in childhood alters the beliefs of men on the use of domestic violence. Table 3.2 reports my findings for the effect of a man's exposure to conflict from ages 0-16 on his attitude toward wife-beating in certain situations. As seen in Panel B, the coefficients for whether wife-beating is justified after an argument is negative and statistically significant for both full and rural samples. Likewise, conflict exposure is also negatively associated with the probability of saying wife-beating is justified when she goes without telling the husband and if she refuses to have sex. In fact, the coefficient for the variable "beating is justified if wife refuses to have sex" is statistically significant for the rural samsple.[2] Finally, in Table 3.A.1, I increase the cut-off age for exposure to 18 and 20 years and re-estimate equation 3.1 for all attitude variables. My coefficients are still negative while statistical significance increases for many of them.[3]

This positive effect on attitude is evidence for how growing up in an adverse environment can significantly affect behavior by altering the underlying preferences of an individual. A subset of the psychology literature on posttraumatic growth developed by Tedeschi and Calhoun argues that large adverse shocks tend to have a persistent effect on one's outlook on life and attitude. As pointed out by Voors et al. (2012), this is what we know in economics as preferences. According to Post-traumatic Growth Theory, struggle with highly stressful and challenging life crises can lead to an experience of positive change afterward known as "post-traumatic growth". In fact, only a minority of people exposed to traumatic

[2] Interestingly childhood exposure to conflict has a positive association with the probability of justifying beating when wife neglects children. Though the coefficients reported on Panel D are not significant, this might be an indication that men value child welfare over spousal welfare.

[3] Increase in education can also potentially explain the change in attitude toward violent behavior. However, Erten and Keskin (2017) find that educational reform in Turkey increased years of schooling of rural women but did not change domestic violence attitudes.

events develop longstanding psychiatric disorders while others have a newfound sense of personal strength. (Tedeschi and Calhoun, 2004). Post-traumatic growth often involves a new appreciation for life, family and intimate relationships, and spiritual development. As a result of which, a person develops more intimacy in personal relationships.

The positive change in attitude toward wife beating after being exposed to armed conflict in childhood is an example of this growth. My findings on attitude are similar to evidence from child soldiering and highly exposed cohort which shows that childhood exposure to violence alters political beliefs and increases political participation and community engagement later on (Blattman (2009), Adhvaryu et al. (2014)). Additionally, girls abducted into combating displayed high resilience and less aggressive social behavior later on despite experiencing high psychological distress (Annan et al., 2011). Taken together, post-traumatic growth and resilience discussed in section 3.4.1 can potentially explain how exposed men whose childhood schooling might have been interrupted can catch up and in-fact surpass the outcomes of unexposed men.

I interpret the change in male attitude toward wide beating brought by the experience of armed-conflict in childhood, especially for the rural population, as a mechanism driving earlier results on spousal violence. Additionally, it can also explain the negative association between father's exposure to conflict and the use of violence against his children. Men who prefer not to perpetrate spousal violence are also less likely to implement violent child disciplining methods.

3.4.3 Marriage market outcomes

Marriage market outcomes might be another channel through which conflict exposure can impact family violence. If exposed men, with more education, are likely to marry more educated women than unexposed men, then this is likely to affect

the outcomes. Educated women are more likely to oppose any form of spousal violence and disapprove of the use of physical violence to discipline their children. They might enjoy higher bargaining status in the relationship which reduces their risk of experiencing violence (Aizer, 2010). Better labor market outcomes of educated women can lead to mothers investing more in their children and hence, can reduce child labor. Additionally, education and the age gap between spouses might impact marital conflict and decisions on child-rearing.

To investigate this mechanism, I estimate the effect of a man's exposure to conflict in his childhood to his marriage market outcomes. The results of these estimations are presented in Table 3.3. I first start with the spousal age difference. A larger age gap between a husband and a wife is often considered to result in power imbalances in the relationship. A relatively younger wife might have less bargaining power when it comes to making decisions regarding her children or her own marital status. Panel A of Table 3.3 shows that, for the DHS sample, the age gap (in years) between spouses is reduced by approximately 30 days, or 2 percent of the sample mean. However, I get insignificant coefficients for the MICS sample. I also check for whether exposed men are likely to marry at later ages. The results on Panel B provides no evidence for the effect of conflict exposure on marriage age of the man.

Panel C of the table reports results for the educational status of spouses of exposed men. For both DHS and MICS samples, conflict exposure in childhood increases the probability of exposed men marrying partners who have completed primary education. I also check for whether exposure to conflict affects spousal education differences. If exposed men are more likely to marry women who have achieved a similar level of formal education, they are less likely to have marital conflict. A healthy relationship can, in fact, lead to less stress and reduction in the use of family violence. As seen in Panel D, though conflict exposure and

spousal education difference are negatively related, the reported estimates are not statistically significant. Finally, the results in Panel E show that exposed men are more likely to have spouses who are currently working.

These findings imply that exposed men marry "higher-quality" partners who are more educated and currently working. Reduction in the spousal age gap can also be another potential channel, though the evidence for this mechanism is weak. Altogether, partner characteristics and marriage market outcomes are likely operative channels driving my results on family violence.

Wife's bargaining power

Better educated women are more likely to have higher bargaining power as their options outside the marriage increases. Previous empirical studies have shown that women's involvement in the labor market reduces their experiences of domestic violence through an increase in their bargaining power (Aizer, 2010).

In the DHS, there are questions on decision making that aim to measure bargaining power within a household. I take the responses to the decision making questions as suggestive evidence of bargaining outcome. If marriage market outcomes are affecting perpetration of spousal violence by men through the bargaining channel, we should expect spouses of exposed men to have more favorable decision-making outcomes. Therefore, I check for whether there is any effect of the husband's conflict exposure on the bargaining outcomes of his wife. The results for various decision-making outcomes are presented in Table 3.7. I fail to find any positive significant effects of man's conflict exposure on a variety of household decisions made by his wife. In fact, as seen in Column 3 of Panel H, the only negative significant effect is on whether a woman has any say on how her husband's income should be spent. These results suggest that marriage market outcomes of exposed men do not affect their perpetration of domestic violence through intra-household bargaining.

Wife's attitude toward domestic violence

As discussed earlier, the characteristics of spouses of conflict exposed men may be different from those who were not exposed. One of the characteristics that matter in this context is the wife's attitude toward domestic violence. Educated women are more likely to disapprove of the use of physical and other coercive forms of violence. I explore this potential mechanism by testing whether exposed men are more likely to marry women who do not justify wife-beating. Tables 3.4 and 3.5 report results on wife's attitude toward domestic for DHS and MICS samples, respectively. Even though exposed men are more likely to have spouses who have completed primary school, I find no evidence that these women are less likely to justify domestic violence. Therefore, the wife's attitude toward domestic violence is not the mechanism at play here. This along with the results on bargaining outcomes suggests that the likelihood of marrying more educated spouses is operating through other ways like reducing marital conflict.

3.4.4 Other channels: Mother's experience of spousal violence

The psychology literature often points towards *family systems theory* which argues that negative aspects of one kind of relationship within a family can adversely affect another relationship (Lutenbacher et al. (2004), Margolin and Gordis (2003)). For instance, mothers affected by spousal violence are also more likely to be physically abusive and to demonstrate verbal aggression toward their children. This suggests that my finding of husband's conflict exposure in childhood decreasing spousal violence could serve as a mechanism for the decrease in child abuse. Given that I do not know who perpetrates violent child disciplining practices within a household, it is plausible to assume that the abuser could be the mother. Therefore, any changes in the mother's outcomes can have positive effects on her child's outcome. As wives of exposed men are less likely to experience spousal

abuse, they can develop healthy family relationships which can then change their parenting attitude. As mothers are less likely to implement harsh parenting techniques, the probability of their children getting abused and neglected also goes down.

3.5 Theories on domestic violence

Next, I assess what the results on family violence and the channels imply about theories on domestic violence. Existing theories highlight two broader motives for perpetrating domestic violence: "Expressive" and "Instrumental". Domestic violence is expressive if the man perpetrating it gains direct utility and non-pecuniary benefits by making it a channel to express his anger or frustration. The gain (loss) in utility can be positive if violence is "expressively pleasurable" or negative if it is "expressively distasteful" (Haushofer et al., 2019).

Any form of domestic violence is instrumental if it is used to extract resources or monetary transfers from the victims. A common assumption in instrumental theories is that domestic violence perpetrated by a male partner depends on his spouse's outside options, often denoted as her "participation constraint". In societies, like Nepal, where divorce is strongly stigmatized with high social costs of leaving the marriage, a woman's outside options are limited. This provides greater incentives for husbands to use more violence to gain control. A special case of instrumental violence is the traditional model of household bargaining (Aizer, 2010) which argues that an improvement in one's bargaining power within the household reduces the chances of experiencing domestic violence.

Theories on domestic violence, as per my knowledge, do not study motives for perpetrating child abuse. Mainly, children do not have outside options and are obliged to stay with their parents. Imposing a participation constraint in this scenario does not seem to be plausible. The best way to use existing theories

to explain child abuse is to compare children to women for whom divorce is not an option. In this scenario, parents can use the unconstrained level of violence to extract resources or services from their children in the form of child labor. However, results in Table 3.6 show that the father's conflict exposure decreases the time allocated to various activities by his child. Unfortunately, this decrease in child work hours does not help us to exactly disentangle whether the motive here is "instrumental" or "expressive". Since exposed men are more likely to complete secondary education and work more in skilled labor (Section 3.4.1), they are also likely to have a better source of income. This might make it unnecessary to use violence to extract resources and services from their children. As a result of which child time allocation in other activities goes down. At the same time, it can be expressive if fathers develop a distaste for violent behavior and value child welfare.

To understand the underlying motives, I check for woman's work and bargaining status within the household. The results from an exposed man's marriage market outcomes (Section 3.4.3) tell us that they are more likely to be married to a woman who currently reports working. If men use violence instrumentally, we would expect working women to be abused more as more resources can be extracted from her. However, in this scenario, women report experiencing less of all kinds of spousal violence. Nevertheless, instrumental theories of violence also illustrate that men can use non-violent threats or spousal control, instead of domestic violence, to extract resources or transfers from women (Bobonis et al., 2013). In this case, one can still observe actual physical abuse going down. In Section 2.5.2, I find evidence for less controlling behavior displayed by exposed men. Similarly, in Section 2.5.1, there is evidence for the decrease in the perpetration of emotional abuse (which also includes threat), especially for the rural sample.

Instrumental theories also suggest that an increase in bargaining power re-

duces the chances of experiencing spousal violence. However, Table 3.7 shows that there are no positive significant effects of man's conflict exposure on a variety of household decisions made by his wife.[4] Taken together, the empirical results are inconsistent with the instrumental theories on household bargaining. Nevertheless, men who were exposed to conflict are more likely to work (Section 3.4.1) which might make using violence to extract resources unnecessary. Therefore, I cannot completely rule out other instrumental motives for domestic violence, though the evidence supporting this theory is weak.

My results on domestic violence resonate more with the expressive theories of domestic violence. As Haushofer et al. (2019) pointed out, though physical violence can be either instrumental or expressive, sexual violence is used expressively. They also point out, in cases where men are likely to have more income but at the same time decrease the use of physical violence, violence though used instrumentally is "expressively distasteful". Additionally, I also find strong support for the decline in the perpetration of sexual violence by men who were exposed from ages 0-16. Furthermore, the argument that family violence in this context is expressive is strengthened by the improvement in men's attitude toward domestic violence. As observed in Section 3.4.2, exposure to conflict in childhood decreases the probability of justifying the use of domestic violence, hence making it "expressively distasteful".

[4]The only significant effect is on whether the wife has any say on spending husband's income. As childhood conflict exposure increases for a man, his wife is less likely to have decision-making power when it comes to his income. In other words, conflict exposure is positively associated with men having more private information on their own income. According to Bobonis et al. (2013), when men are likely to have more private information on their own resources, they can use violence instrumentally to seek transfer or rent from their spouses. Evidence provided on earlier sections show that this is not likely to be the case here.

3.6 Conclusion

In Chapter 2, I find that a man's exposure to the Nepalese Civil War (1996-2006) in childhood reduces the likelihood of the perpetration of spousal violence. Additionally, children of exposed fathers experience less physical and psychological abuse; they are also less likely to be working in hazardous forms of child labor. To understand what drives these long-lasting positive impacts of a negative experience in childhood, this chapter investigates several channels.

I find that men who are exposed to conflict from ages 0-16 are more likely to complete secondary schooling and to work in skilled non-agricultural occupations. Another pertinent mechanism here is the change in attitude toward violence brought by exposure to traumatic and stressful events in childhood. In other words, exposure to the conflict environment in childhood might develop dis-taste for using violence at home. Finally, exposed men are also more likely to marry women of their age and their partners are more likely to complete primary schooling which might be partially driving the outcomes. Analyzing the implications of empirical results for the theories on domestic violence, I find that the underlying motive for family violence is "expressive"; i.e., exposed men receive non-pecuniary dis-utility from perpetrating violence at home. This also indicates that preferences, observed through behavior, are endogenous and likely to be dependent on life experiences.

My results have important policy implications. Different underlying motives for engaging in family violence require different policy interventions. For instance, if the motive for family violence is purely instrumental, then policies that improve women's outside options (bargaining power), such that the threat of leaving the marriage is more credible, might be more appropriate. In this paper, the motive for family violence is more expressive. Therefore, policies that target to alter

preferences and subsequently behaviors, like television programs or street theater, might be more effective. For example, significant improvement in knowledge and attitude toward HIV and risky sexual behavior was found after the implementation of entertaining educational TV series (**edutainment** programs) in Nigeria (Banerjee et al., 2019). Most of the time, when violence is both instrumental and expressive, we might need policies that are a mixed bag of the above-mentioned options. Finally, the positive long-run educational, occupational, attitude, and marriage market outcomes show that people affected by adverse circumstances can "bounce-back" and achieve outcomes similar to their unexposed peers. Therefore, there is a potential for policies to be built around people's resilience to various adverse circumstances like war, natural disasters, disease epidemics, and other humanitarian crises.

3.7 Tables

Table 3.1: Effect of conflict exposure on educational attainment & work status

	DHS		MICS	
	All	Rural	All	Rural
	[1]	[2]	[3]	[4]
	Panel A: Years of education			
Conflict exposure	0.058**	0.044	0.073*	0.075*
	(0.029)	(0.028)	(0.044)	(0.045)
Obs.	2708	2341	9649	7138
Mean Outcome.	6.730	6.568	7.190	6.506
	Panel B: Completed secondary education			
Conflict exposure	0.013**	0.013**	0.007***	0.007***
	(0.005)	(0.005)	(0.002)	(0.002)
Obs.	3010	2597	10757	7974
Mean Outcome.	0.348	0.324	0.350	0.280
	Panel C: Worked in past 12 months			
Conflict exposure	0.001	-0.000		
	(0.003)	(0.003)		
Obs.	3517	3043		
Mean Outcome.	0.862	0.869		
	Panel D: Skilled manual/non-manual work (non-agriculture)			
Conflict exposure	0.004**	0.002		
	(0.002)	(0.002)		
Obs.	3517	3043		
Mean Outcome.	0.401	0.377		
Additional Regressors: Year of Birth, Ethnicity & Location Fixed Effects: Controls				

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's exposure to no. of casualties/1000 population between ages 0-16. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: household's size, and wealth score. Outcome variable in Panel A is the total number of years of education and whereas in Panel B is an indicator for completing secondary education. Panel C is an indicator for whether the respondent worked in past 12 months. Finally, outcome variable in Panel D takes value 1 if the respondent worked in skilled (manual or non-manual) non-agricultural job in past 12 months. The sample is restricted to men who have lived in the same place for more than 10 years for the DHS sample. Information on work status is not available for the MICS sample. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 3.2: Effect of conflict exposure on attitude toward wife beating

	All	Rural	All	Rural
	[1]	[2]	[3]	[4]
	Panel A: Beating justified if wife argues		**Panel B: Beating justified if wife goes w/o telling him**	
Conflict exposure	-0.004**	-0.004**	-0.002	-0.002
	(0.002)	(0.002)	(0.003)	(0.003)
Obs.	3512	3038	3513	3040
Mean Outcome.	0.103	0.106	0.105	0.112
	Panel C: Beating justified if she refuses to have sex		**Panel D: Beating justified if she neglects children**	
Conflict exposure	-0.002	-0.002*	0.002	0.002
	(0.001)	(0.001)	(0.002)	(0.002)
Obs.	3503	3030	3511	3038
Mean Outcome.	0.043	0.047	0.209	0.214
Additional Regressors: Year of Birth, Ethnicity & Location Fixed Effects: Controls				

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's exposure to no. of casualties/1000 population between ages 0-16. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: household's size, and wealth score. Outcome variables in Panels A-D are indicators for if the man answered wife beating is justified for that specific reason. The sample is restricted to men who have lived in the same place for more than 10 years. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 3.3: Effect of conflict exposure on marriage market outcomes

	DHS		MICS	
	All	Rural	All	Rural
	[1]	[2]	[3]	[4]
	Panel A: Spousal age gap			
Conflict exposure	-0.073**	-0.078**	-0.001	0.009
	(0.031)	(0.030)	(0.028)	(0.028)
Obs.	2376	2080	7082	5459
Mean Outcome.	3.474	3.384	3.426	3.307
	Panel B: Age when first married			
Conflict exposure	0.007	0.006		
	(0.030)	(0.033)		
Obs.	2404	2103		
Mean Outcome.	20.634	20.454		
	Panel C: Wife completed primary education			
Conflict exposure	0.011***	0.011***	0.009*	0.008*
	(0.003)	(0.003)	(0.005)	(0.004)
Obs.	2171	1893	7082	5459
Mean Outcome.	0.451	0.427	0.393	0.327
	Panel D: Education gap			
Conflict exposure	-0.015	-0.021	-0.041	-0.031
	(0.038)	(0.040)	(0.036)	(0.034)
Obs.	2171	1893	7056	5442
Mean Outcome.	0.451	0.427	2.649	2.852
	Panel E: Wife currently working			
Conflict exposure	0.012**	0.011*		
	(0.006)	(0.006)		
Obs.	2171	1893		
Mean Outcome.	0.622	0.634		
Additional Regressors: Year of Birth, Ethnicity & Location Fixed Effects: Controls				

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's exposure to no. of casualties/1000 population between ages 0-16. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: woman's age (for Panels C & D), household's size, and wealth score. Outcome variable in Panel A is the difference in age between spouses. Outcome in Panel B is man's age at first marriage. The dependent variable in Panel C is an indicator for whether wife has completed primary education. Finally, Panel D is the difference in years of education between husband and wife and Panel E is an indicator for whether wife is currently working or not. The sample is restricted to men who have lived in the same place for more than 10 years for the DHS sample. Information on age of first marriage and wife's current work status is not available for the MICS survey. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 3.4: Man's conflict exposure and wife's attitude toward domestic violence (DHS)

	All	Rural	All	Rural
	[1]	[2]	[3]	[4]
	Panel A: Beating justified if wife argues		**Panel B: Beating justified if wife goes w/o telling him**	
Conflict exposure	0.005	0.006	0.004	0.006
	(0.005)	(0.005)	(0.005)	(0.005)
Obs.	2170	1892	2168	1890
Mean Outcome.	0.086	0.087	0.120	0.120
	Panel C: Beating justified if she refuses to have sex		**Panel D: Beating justified if she neglects children**	
Conflict exposure	-0.001	-0.001	0.005	0.006
	(0.001)	(0.001)	(0.005)	(0.005)
Obs.	2167	1890	2168	1891
Mean Outcome.	0.024	0.025	0.213	0.215
Additional Regressors: Year of Birth, Ethnicity & Location Fixed Effects: Controls				

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (husband's) exposure to no. of casualties/1000 population between ages 0-16. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: household's size, wife's age, and wealth score. Outcome variables in Panels A-D are indicators for if the spouse of the man answered wife beating is justified for that specific reason. The sample is restricted to those women whose husbands have lived in the same place for more than 10 years. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 3.5: Man's conflict exposure and wife's attitude toward domestic violence (MICS)

	All	Rural	All	Rural
	[1]	[2]	[3]	[4]
	Panel A: Beating justified if wife argues		**Panel B: Beating justified if wife goes w/o telling him**	
Conflict exposure	0.001	0.000	0.010	0.010
	(0.005)	(0.004)	(0.007)	(0.008)
Obs.	6636	5089	6685	5133
Mean Outcome.	0.212	0.239	0.299	0.330
	Panel C: Beating justified if she refuses to have sex		**Panel D: Beating justified if she neglects children**	
Conflict exposure	0.001	-0.000	0.006	0.006
	(0.002)	(0.002)	(0.006)	(0.006)
Obs.	6571	5036	6685	5134
Mean Outcome.	0.040	0.045	0.369	0.404
Additional Regressors: Year of Birth, Ethnicity & Location Fixed Effects: Controls				

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (husband's) exposure to no. of casualties/1000 population between ages 0-16. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: household's size, wife's age, and wealth score. Outcome variables in Panels A-D are indicators for if the spouse of the man answered wife beating is justified for that specific reason. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

Table 3.6: Effect of father's childhood conflict exposure on his child's time use/work (hours)

	All	Rural	All	Rural
	[1]	[2]	[3]	[4]
	Panel A: Total hours worked		**Panel B: Hours in economic activity**	
Conflict exposure	-0.904*	-0.713	-0.513**	-0.470*
	(0.531)	(0.475)	(0.260)	(0.249)
Obs.	5005	3930	4997	3924
Mean Outcome.	12.413	14.221	4.708	5.470
	Panel C: Hours in fetching water/collecting firewood		**Panel D: Hours in domestic chores**	
Conflict exposure	-0.452**	-0.400**	-0.064	-0.001
	(0.183)	(0.174)	(0.295)	(0.292)
Obs.	4997	3924	4996	3923
Mean Outcome.	2.413	2.838	5.313	5.936
Additional Regressors: Year of Birth, Ethnicity & Location Fixed Effects: Controls				

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (father's) exposure to no. of casualties/1000 population between ages 0-16. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: gender, age and age ranking among resident siblings of the child, total number of children less than 17 years of age in the household, household's size, wealth score, and mother's age. Each outcome variable in Panels A-D is the total hours a child selected for MICS child labor module engaged in this specific activity pst week. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%,

Table 3.7: Effect of husband's conflict exposure on wife's decision making outcomes

	All	Rural	All	Rural	All	Rural
	[1]	[2]	[3]	[4]	[5]	[6]
	Panel A: Say in atleast one decision		**Panel B: Spending own income**		**Panel C: Own inheritance**	
Conflict exposure	0.002	0.001	-0.031	-0.025	0.011	0.010
	(0.003)	(0.003)	(0.033)	(0.036)	(0.007)	(0.007)
Obs.	2171	1893	633	517	2171	1893
Mean Outcome.	0.795	0.781	0.806	0.790	0.750	0.742
	Panel D: Large household purchases		**Panel E: Own health care**		**Panel F: Visiting relatives**	
Conflict exposure	0.002	0.003	-0.002	-0.002	0.002	0.002
	(0.006)	(0.005)	(0.005)	(0.005)	(0.003)	(0.003)
Obs.	2171	1893	2171	1893	2171	1893
Mean Outcome.	0.443	0.426	0.443	0.487	0.477	0.461
	Panel G: Children education		**Panel H: Spending husband's income**			
Conflict exposure	-0.000	-0.001	-0.008**	-0.008**		
	(0.006)	(0.006)	(0.004)	(0.004)		
Obs.	2171	1893	2143	1868		
Mean Outcome.	0.567	0.560	0.536	0.523		
Additional Regressors: Year of Birth, Ethnicity & Location Fixed Effects: Controls						

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's (husband's) exposure to no. of casualties/1000 population between ages 0-16. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: household's size, woman's age and wealth score. The outcome variable in Panel A is a binary that takes value 1 if a woman has some say in at-least one family decision making process on spending income, her health, visiting family/relatives, large household purchases, and education of children. Spending own income takes value 1 if a woman has some say in how her income should be spent. Own inheritance takes value 1 if the respondent has some say in her inheritance (pewa). Household Purchase is an indicator for a woman having some say in making large household purchases. Own Health Care and visiting relative take value 1 if a woman has any say in any of these decision making processes. Children Education takes value 1 if a woman has some say on education of children and Spending husband's income is an indicator for if a woman has any say on how her husband's income should be spent. The sample is restricted to women who were interviewed in the domestic violence module and whose husbands were interviewed in the men module and have lived in the same place for more than 10 years. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

APPENDIX

3.A Tables

Table 3.A.1: Effect of conflict exposure on attitude toward wife beating

	All	Rural	All	Rural
	[1]	[2]	[3]	[4]
Conflict exposure at age:	**Panel A: No. of situations wife beating is justified**		**Panel B: Beating justified if wife argues**	
<=18	-0.010*	-0.011*	-0.006***	-0.006***
	(0.006)	(0.006)	(0.002)	(0.002)
<=20	-0.011*	-0.012*	-0.006***	-0.007***
	(0.006)	(0.006)	(0.002)	(0.002)
Obs.	3517	3043	3512	3038
Mean Outcome.	0.482	0.500	0.103	0.106
Conflict exposure at age:	**Panel C: Beating justified if wife goes w/o telling him**		**Panel D: Beating justified if she refuses to have sex**	
<=18	-0.002	-0.002	-0.003*	-0.003*
	(0.003)	(0.003)	(0.002)	(0.002)
<=20	-0.002	-0.002	-0.003	-0.003
	(0.003)	(0.003)	(0.002)	(0.002)
Obs.	3513	3040	3503	3030
Mean Outcome.	0.105	0.112	0.043	0.047
Conflict exposure at age:	**Panel E: Beating justified if she neglects children**			
<=18	0.001	0.001		
	(0.003)	(0.003)		
<=20	0.001	0.001		
	(0.003)	(0.003)		
Obs.	3511	3038		
Mean Outcome.	0.209	0.214		
Additional Regressors: Year of Birth, Ethnicity & Location Fixed Effects: Controls				

Notes: The table above reports the estimated coefficients (β) from specification 3.1. Conflict exposure denotes man's exposure to no. of casualties/1000 population between ages 0-1y and 0-20, respectively. Standard errors are clustered by VDC or municipality of birth. Each cell represents result from different regression. The results are estimated using OLS. Controls include: household's size, and wealth score. Outcome variable in Panel A is the total number of situations a man aged 15-49 surveyed in the DHS man's survey agreed that a husband is justified in hitting or beating his wife. Variables in Panels B-E are indicators for if the man answered wife beating is justified for that specific reason. The sample is restricted to men who have lived in the same place for more than 10 years. Mean Outcome reports respective average value of the dependent variables in this sample. *** Significant at 1%, ** Significant at 5%, & * Significant at 10% level of significance.

BIBLIOGRAPHY

Adhvaryu, A., J. Fenske, et al. (2014): "Conflict and the formation of political beliefs in Africa," *Household in Conflict Network*, 164. 40, 43, 52, 94, 102

Adhvaryu, A., J. E. Fenske, G. Khanna, and A. Nyshadham (2018): "Resources, Conflict, and Economic Development in Africa," Tech. rep., National Bureau of Economic Research. 22

Aizer, A. (2010): "The gender wage gap and domestic violence," *American Economic Review*, 100, 1847–59. 53, 93, 103, 104, 106

Akbulut-Yuksel, M. (2017): "War during childhood: The long run effects of warfare on health," *Journal of health economics*, 53, 117–130. 95

Akresh, R. (2008): *Armed conflict and schooling: Evidence from the 1994 Rwandan genocide*, vol. 3516, World Bank Publications. 1, 2, 4, 93, 95

Akresh, R., S. Bhalotra, M. Leone, and U. O. Osili (2012a): "War and stature: growing up during the Nigerian Civil War," *American Economic Review*, 102, 273–77. 95

——— (2017): "First and Second Generation Impacts of the Biafran War," Tech. rep., National Bureau of Economic Research. 40, 44, 52

Akresh, R., L. Lucchetti, and H. Thirumurthy (2012b): "Wars and child health: Evidence from the Eritrean–Ethiopian conflict," *Journal of development economics*, 99, 330–340. 1, 2

Almond, D., J. Currie, and V. Duque (2018): "Childhood circumstances and adult outcomes: Act II," *Journal of Economic Literature*, 56, 1360–1446. 40

Almond, D., J. Currie, and M. Herrmann (2012): "From infant to mother:

Early disease environment and future maternal health," *Labour Economics*, 19, 475–483. 44

Annan, J., C. Blattman, D. Mazurana, and K. Carlson (2011): "Civil war, reintegration, and gender in Northern Uganda," *Journal of conflict resolution*, 55, 877–908. 43, 93, 94, 95, 102

Banerjee, A., E. L. Ferrara, and V. H. Orozco-Olvera (2019): "The entertaining way to behavioral change: Fighting HIV with MTV," Tech. rep., National Bureau of Economic Research. 110

Bauer, M., A. Cassar, J. Chytilová, and J. Henrich (2014): "War's enduring effects on the development of egalitarian motivations and in-group biases," *Psychological science*, 25, 47–57. 52

Bendiksen, J. and E. Douglas (2005): "Inside Nepal's Revolution," *National Geographic Magazine*, 46+. 6, 45

Benjamini, Y. and Y. Hochberg (1995): "Controlling the false discovery rate: a practical and powerful approach to multiple testing," *Journal of the Royal statistical society: series B (Methodological)*, 57, 289–300. 65

Blattman, C. (2009): "From violence to voting: War and political participation in Uganda," *American political Science review*, 103, 231–247. 43, 94, 102

Blattman, C. and J. Annan (2010): "The consequences of child soldiering," *The review of economics and statistics*, 92, 882–898. 95

Bobonis, G. J., M. González-Brenes, and R. Castro (2013): "Public transfers and domestic violence: The roles of private information and spousal control," *American Economic Journal: Economic Policy*, 5, 179–205. 107, 108

Brown, R., V. Montalva, D. Thomas, and A. Velásquez (2017): "Impact of violent crime on risk aversion: Evidence from the Mexican drug war," Tech. rep., National Bureau of Economic Research. 5

Browne, A. and D. Finkelhor (1986): "Impact of child sexual abuse: A

review of the research." *Psychological bulletin*, 99, 66. 39

Bundervoet, T. et al. (2006): "Livestock, activity choices and conflict: evidence from Burundi," Tech. rep., Households in Conflict Network. 5

Callen, M., M. Isaqzadeh, J. D. Long, and C. Sprenger (2014): "Violence and risk preference: Experimental evidence from Afghanistan," *American Economic Review*, 104, 123–48. 5

Campbell, J. C. (2002): "Health consequences of intimate partner violence," *The lancet*, 359, 1331–1336. 40

Card, D. and G. B. Dahl (2011): "Family violence and football: The effect of unexpected emotional cues on violent behavior," *The Quarterly Journal of Economics*, 126, 103–143. 53

Catani, C., E. Schauer, T. Elbert, I. Missmahl, J.-P. Bette, and F. Neuner (2009): "War trauma, child labor, and family violence: Life adversities and PTSD in a sample of school children in Kabul," *Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies*, 22, 163–171. 43, 62

Cederman, L.-E., K. S. Gleditsch, and H. Buhaug (2013): *Inequality, grievances, and civil war*, Cambridge University Press. 23

Chamarbagwala, R. and H. E. Morán (2011): "The human capital consequences of civil war: Evidence from Guatemala," *Journal of Development Economics*, 94, 41–61. 2

Cicchetti, D. and F. A. Rogosch (2001): "The impact of child maltreatment and psychopathology on neuroendocrine functioning," *Development and psychopathology*, 13, 783–804. 39

Coker, A. L., K. E. Davis, I. Arias, S. Desai, M. Sanderson, H. M. Brandt, and P. H. Smith (2002): "Physical and mental health effects of intimate partner violence for men and women," *American journal of preventive*

medicine, 23, 260–268. 40

Conger, R. D., T. J. Schofield, and T. K. Neppl (2012): "Intergenerational continuity and discontinuity in harsh parenting," *Parenting*, 12, 222–231. 40

Coohey, C. (2000): "The role of friends, in-laws, and other kin in father-perpetrated child physical abuse." *Child Welfare*, 79. 59

Craig, C. D. and G. Sprang (2007): "Trauma exposure and child abuse potential: Investigating the cycle of violence," *American Journal of Orthopsychiatry*, 77, 296–305. 44

Crost, B., J. Felter, and P. Johnston (2014): "Aid under fire: Development projects and civil conflict," *American Economic Review*, 104, 1833–56. 23

Currie, J. and E. Moretti (2007): "Biology as destiny? Short-and long-run determinants of intergenerational transmission of birth weight," *Journal of Labor economics*, 25, 231–264. 44

Currie, J. and M. Rossin-Slater (2013): "Weathering the storm: Hurricanes and birth outcomes," *Journal of health economics*, 32, 487–503. 55

Currie, J. and E. Tekin (2006): "Does child abuse cause crime?" Tech. rep., National Bureau of Economic Research. 40

De Bellis, M. D. and L. A. Thomas (2003): "Biologic findings of post-traumatic stress disorder and child maltreatment," *Current psychiatry reports*, 5, 108–117. 40

De Ree, J. and E. Nillesen (2009): "Aiding violence or peace? The impact of foreign aid on the risk of civil conflict in sub-Saharan Africa," *Journal of Development Economics*, 88, 301–313. 22

Di Maio, M. and T. K. Nandi (2013): "The effect of the Israeli–Palestinian conflict on child labor and school attendance in the West Bank," *Journal of Development Economics*, 100, 107–116. 5

Do, Q.-T. and L. Iyer (2010): "Geography, poverty and conflict in Nepal,"

Journal of Peace Research, 47, 735–748. 8, 46, 56

Dube, O. and J. F. Vargas (2013): "Commodity price shocks and civil conflict: Evidence from Colombia," *The Review of Economic Studies*, 80, 1384–1421. 23

Dube, S. R., V. J. Felitti, M. Dong, W. H. Giles, and R. F. Anda (2003): "The impact of adverse childhood experiences on health problems: evidence from four birth cohorts dating back to 1900," *Preventive medicine*, 37, 268–277. 40

Duque, V. (2016): "Early-life conditions, parental investments, and child development: Evidence from a violent conflict," Tech. rep., Working Paper. 1

Edmonds, E. V. (2007): "Child labor," *Handbook of development economics*, 4, 3607–3709. 49, 60, 62

Eggerman, M. and C. Panter-Brick (2010): "Suffering, hope, and entrapment: Resilience and cultural values in Afghanistan," *Social science & medicine*, 71, 71–83. 100

Erten, B. and P. Keskin (2017): "Breaking the Cycle? Education and the Intergenerational Transmission of Violence," *Review of Economics and Statistics*, 1–46. 39, 59, 91, 98, 101

Esteban, J., L. Mayoral, and D. Ray (2012): "Ethnicity and conflict: An empirical study," *American Economic Review*, 102, 1310–42. 23

Estevan, F. and J.-M. Baland (2007): "Mortality risks, education and child labor," *Journal of Development Economics*, 84, 118–137. 4, 23

Fang, X., D. S. Brown, C. S. Florence, and J. A. Mercy (2012): "The economic burden of child maltreatment in the United States and implications for prevention," *Child abuse & neglect*, 36, 156–165. 39

Fernández, M., A. M. Ibáñez, and X. Peña (2011): *Adjusting the labor supply to mitigate violent shocks: Evidence from Rural Colombia*, The World Bank. 5

Forastieri, V. (2002): *Children at work: health and safety risks*, International Labour Organization. 40

Haushofer, J., C. Ringdal, J. P. Shapiro, and X. Y. Wang (2019): "Income Changes and Intimate Partner Violence: Evidence from Unconditional Cash Transfers in Kenya," Tech. rep., National Bureau of Economic Research. 40, 53, 94, 106, 108

Hochberg, Y. (1988): "A sharper Bonferroni procedure for multiple tests of significance," *Biometrika*, 75, 800–802. 65

Holm, S. (1979): "A simple sequentially rejective multiple test procedure," *Scandinavian journal of statistics*, 65–70. 65

Holmes, W. C. and M. D. Sammel (2005): "Brief communication: Physical abuse of boys and possible associations with poor adult outcomes," *Annals of internal medicine*, 143, 581–586. 40

Holt, S., H. Buckley, and S. Whelan (2008): "The impact of exposure to domestic violence on children and young people: A review of the literature," *Child abuse & neglect*, 32, 797–810. 40

ILO (2017): "Global Estimates of Child Labour: Results and Trends, 2012–2016," . 39

Jayachandran, S. (2015): "The roots of gender inequality in developing countries," *economics*, 7, 63–88. 53

Kassouf, A. L., M. McKee, and E. Mossialos (2001): "Early entrance to the job market and its effect on adult health: evidence from Brazil," *Health Policy and Planning*, 16, 21–28. 40

Kim, Y.-I. and J. Lee (2012): "Long run impact of traumatic experience on attitudes toward risk: study of Korean war and its impact on risk aversion," in *paper delivered at the 4th Annual Meeting on the Economics of Risky Behaviors, Bahçeşehir University, Istanbul (April 2012)*. 43

Lutenbacher, M., A. Cohen, and N. M. Conner (2004): "Breaking the cycle of family violence: Understanding the perceptions of battered women," *Journal of Pediatric Health Care*, 18, 236–243. 105

Luthar, S. S., D. Cicchetti, and B. Becker (2000): "The construct of resilience: A critical evaluation and guidelines for future work," *Child development*, 71, 543–562. 93, 99

Makhoul, J., R. Shayboub, and J. Jamal (2004): "Violence: The silent determinant of child labor," *Journal of Children and Poverty*, 10, 131–147. 43, 62

Mansour, H. and D. I. Rees (2012): "Armed conflict and birth weight: Evidence from the al-Aqsa Intifada," *Journal of Development Economics*, 99, 190–199. 1

Margolin, G. and E. B. Gordis (2003): "Co-occurrence between marital aggression and parents' child abuse potential: The impact of cumulative stress," *Violence and victims*, 18, 243. 105

Mattina, G. and O. Shemyakina (2017): "Domestic Violence and Childhood Exposure to Armed Conflict: Attitudes and Experiences," Tech. rep., Households in Conflict Network. 43, 94

Michalopoulos, S. and E. Papaioannou (2013): "Pre-colonial ethnic institutions and contemporary African development," *Econometrica*, 81, 113–152. 23

Miguel, E., S. M. Saiegh, and S. Satyanath (2011): "Civil war exposure and violence," *Economics & Politics*, 23, 59–73. 23

Moeller, T. P., G. A. Bachmann, and J. R. Moeller (1993): "The combined effects of physical, sexual, and emotional abuse during childhood: Long-term health consequences for women," *Child abuse & neglect*, 17, 623–640. 40

Molina, T. (2016): "Health-Seeking Amidst Conflict: Evidence from the Philip-

pines," . 4, 17, 24

Montalvo, J. G. and M. Reynal-Querol (2005): "Ethnic polarization, potential conflict, and civil wars," *American economic review*, 95, 796–816. 23

Morales, A. and P. Singh (2015): "The effects of child physical maltreatment on nutritional outcomes: evidence from Peru," *The Journal of Development Studies*, 51, 826–850. 39

Nagata, Donna, K. and J. Takeshita, Yuzuru (1998): "Coping and resilience across generations: Japanese Americans and the World War II internment," *Psychoanalytic review*, 85, 587–613. 100

Nunn, N. and N. Qian (2014): "US food aid and civil conflict," *American Economic Review*, 104, 1630–66. 22

O'Donnell, O., E. Van Doorslaer, and F. C. Rosati (2002): "Child labour and health: Evidence and research issues," *Understanding Children's Work Programme Working Paper*. 40

Parker, D. (1997): "Health effects of child labour," *The Lancet*, 350, 1395–1396. 40

Richards, P. (1996): "Fighting for the Rain Forest: Youth, War and Resources in Sierra Leone," *Oxfo Currey*. 23

Rodriguez, C. and F. Sanchez (2012): "Armed conflict exposure, human capital investments, and child labor: evidence from Colombia," *Defence and peace economics*, 23, 161–184. 2, 5

Ross, M. (2006): "A closer look at oil, diamonds, and civil war," *Annu. Rev. Polit. Sci.*, 9, 265–300. 22

Ross, M. L. (2004): "What do we know about natural resources and civil war?" *Journal of peace research*, 41, 337–356. 22

Saile, R., V. Ertl, F. Neuner, and C. Catani (2014): "Does war contribute to family violence against children? Findings from a two-generational multi-

informant study in Northern Uganda," *Child abuse & neglect*, 38, 135–146. 40, 44

Schneider, D., K. Harknett, and S. McLanahan (2016): "Intimate partner violence in the Great Recession," *Demography*, 53, 471–505. 98

Schneider, W., J. Waldfogel, and J. Brooks-Gunn (2017): "The Great Recession and risk for child abuse and neglect," *Children and youth services review*, 72, 71–81. 99

Sears, D. O. and N. A. Valentino (1997): "Politics matters: Political events as catalysts for preadult socialization," *American Political Science Review*, 91, 45–65. 52

Shemyakina, O. (2011): "The effect of armed conflict on accumulation of schooling: Results from Tajikistan," *Journal of Development Economics*, 95, 186–200. 2, 4, 95

Shrestha, M. (2017): *Push and pull: A study of international migration from Nepal*, The World Bank. 8, 46

Shrestha, N. R. (1997): *In the Name of Development: A Reflection on Nepal*, University Press of America. 7, 45

Singhal, S. (2018): "Early life shocks and mental health: The long-term effect of war in Vietnam," *Journal of Development Economics*. 40, 65, 95

Skrede Gleditsch, K. and A. Ruggeri (2010): "Political opportunity structures, democracy, and civil war," *Journal of Peace Research*, 47, 299–310. 23

Tauchen, H. V., A. D. Witte, and S. K. Long (1991): "Domestic violence: A nonrandom affair," *International Economic Review*, 491–511. 94

Tedeschi, R. G. and L. G. Calhoun (2004): "" Posttraumatic growth: Conceptual foundations and empirical evidence"," *Psychological inquiry*, 15, 1–18. 41, 91, 93, 102

Thornberry, T. P., K. E. Knight, and P. J. Lovegrove (2012): "Does

maltreatment beget maltreatment? A systematic review of the intergenerational literature," *Trauma, Violence, & Abuse*, 13, 135–152. 40

UN (2012): "Nepal Conflict Report," Tech. rep., United Nations Office of the High Commissioner for Human Rights (UN OHCHR), Geneva. 6, 7, 44, 45

Valente, C. (2013): "Education and civil conflict in Nepal," *The World Bank Economic Review*, 28, 354–383. 5, 24

Voors, M. J., E. E. Nillesen, P. Verwimp, E. H. Bulte, R. Lensink, and D. P. Van Soest (2012): "Violent conflict and behavior: a field experiment in Burundi," *American Economic Review*, 102, 941–64. 5, 43, 101

Weinstein, J. M. (2006): *Inside rebellion: The politics of insurgent violence*, Cambridge University Press. 22

WHO (2013): "Global and regional estimates of violence against womenPrevalence and health effects of intimate partner violence and non-partner sexual violence," in *Global and regional estimates of violence against womenPrevalence and health effects of intimate partner violence and non-partner sexual violence.* 39

Wood, E. J. (2003): *Insurgent collective action and civil war in El Salvador*, Cambridge University Press. 23

Yount, K. M., A. M. DiGirolamo, and U. Ramakrishnan (2011): "Impacts of domestic violence on child growth and nutrition: A conceptual review of the pathways of influence," *Social science & medicine*, 72, 1534–1554. 40

Zigler, E. and N. W. Hall (1989): "Physical child abuse in America: Past, present, and future," *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect*, 38–75. 59