The Impacts of Terrorist Attacks on Teenagers' Socioemotional Skills and Risky Health Behaviors

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Abstract

This paper explores the impact of exposure to violence during childhood (0-9 years old) on socioemotional skills and risky health behaviors in adolescence. Using data from the Colombian Longitudinal Survey and municipality-level administrative data, I exploit the within-municipality cross-cohort variation of terrorist attacks among teenagers living in urban areas of Colombia. I find robust evidence that exposure to terrorist attacks is associated with a 0.046 SD increase in socioemotional difficulties experienced, mainly driven by increased hyperactivity, and a 6.5% increase in the probability of drinking. These results highlight the potential consequences of violence on new outcomes related to adolescent health.

Keywords: Conflict, Children, Adolescence, Socioemotional skills, Alcohol

JEL: I12, J13, D10, F51

Please note that an Online Appendix is included.

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1 Introduction

Exposure to armed conflict events is common for individuals in developing and some developed countries. Over 43 countries around the globe have experienced civil war and violence since 2000 (Marshall, 2020).[1] Events such as terrorist attacks are a canonical example of an Adverse Childhood Experience (ACE) due to their potential impact on health and well-being in the short and long term.[2] The consequences are likely even more dramatic when exposure occurs during childhood, which is a critical period for developing essential cognitive and non-cognitive skills (Almond et al., 2018; Conti and Heckman, 2012; Cunha and Heckman, 2007).[3] Similarly, armed conflict has been shown to have negative consequences on the accumulation of noncognitive skills in adolescence and worse health outcomes in adulthood (Akbulut-Yuksel, 2014; Jürges et al., 2022).

Traumatic events can affect socioemotional skills and risky behaviors during adolescence as the brain is still developing, and can promote risk taking and novelty seeking (Giedd, 2004; Winters and Arria, 2011). In fact, socioemotional skills and risky health behaviors are strongly related to future outcomes. For example, socioemotional skills are positively correlated with the labor market and educational results (Borghans et al., 2008; Deming, 2017).[4] Meanwhile, risky behaviors can have significant consequences on academic performance (Renna, 2008), are often persistent (Chassin et al., 1996; Gruber and Zinman, 2001), trigger other risky behaviors or use of harder drugs (Rees et al., 2001; Grossman and Markowitz, 2005; Deza, 2015), and play a role in premature deaths (Cawley and Ruhm, 2011). Moreover, substance use during adolescence impacts the long-term labor market outcomes and educational attainment (Mezza and Buchinsky, 2021)

In this paper, I study the effect of exposure to terrorist attacks as a child in their munic-

[1] Moreover, real-time data on the location of armed conflict events around the world suggests that these events are still prevalent, with over 10,000 events and 19,571 fatalities in July 2023 (Raleigh et al., 2010), and that global peacefulness has deteriorated in the last years (Institute for Economics and Peace, 2023).

[2] See Abadie and Gardeazabal (2003) and Brodeur and Yousaf (2022) for the economic consequences of conflict

[3] Early childhood corresponds to the first five years of a child's life and the in-utero period.

[4] See, also, Heckman and Rubinstein (2001); Heckman et al. (2006); Lindqvist and Vestman (2011)

ipality on subsequent socioemotional skills and risky health behaviors (drinking and smoking).[5] To this end, I exploit the within-municipality cross-cohort exposure to terrorist attacks between 2000 and 2012 to identify their causal effects on children's future outcomes in Colombia. The Colombian context offers a valuable opportunity to study the impact of terrorist attacks on teenagers' outcomes because it has experienced a long-lasting conflict spanning six decades, resulting in over 2 million children and adolescents becoming victims of violent events.[6] The high frequency of such events makes it one of the country's most prevalent forms of adverse childhood experiences. Despite the number of children exposed to violent events, little is known about the medium-term (i.e., adolescence) impacts on their socioemotional skills and risky health behaviors, and most of the evidence is based on descriptive data.[7]

Early-childhood environments affect long-term results (Currie, 2001; Gould et al., 2011; Heckman, 2000; Heckman et al., 2013). However, how exposure to terrorist attacks affects medium-term outcomes is theoretically unclear. On the one hand, exposure to local violence has negative impacts (Koppensteiner and Menezes, 2021). On the other hand, children are resilient and can effectively "bounce back" after traumatic experiences, indicating that exposure to violence may not necessarily have long-lasting effects (Garrett et al., 2019). As a result, the net medium-term effect of terrorist attacks remains ambiguous.[8] Identifying how the middle years are affected is critical to understanding how the developmental trajectories are shaped by the experiences over the life course (Almond et al., 2018)

This study combines two data sets. The first data set contains individual-level data from the Colombian Longitudinal Survey (ELCA) for 870 teenagers ages 13 to 16 years living in

[5]Terrorist attacks include assaults or ambushes against military forces and attacks on civilian buildings and general infrastructure. Armed groups have widely used these attacks to maintain territorial control by generating fear.

[6]Data available from the National Information Network of the Unit for the Victims Assistance and Reparation. Data retrieved from National Information Network on March 9, 2022.

[7]There is limited evidence on the impact of ACEs and risky health behaviors for other countries (Dube et al., 2006; Shonkoff et al., 2012).

[8]The literature on early childhood interventions shows a similar pattern. Effects on test scores "fade out" by age 8 or 9 but then reappear in adulthood Almond and Currie (2011)

urban areas of the country. This survey includes detailed information on socioemotional skills (Strengths and Difficulties Questionnaire) and self-reported measures of risky health behaviors. The second data set contains information on all terrorist attacks in each municipality in Colombia between 2000-2016. The empirical strategy leverages the within-municipality cross-cohort variation of terrorist attacks. It exploits the variation in exposure to violence during childhood (0-9 years old) across different cohorts of adolescents within a given municipality. Identifying the effect of municipality violence on future outcomes is challenging, mainly due to sorting concerns. The identification strategy relies on the premise that shocks in the municipality are unpredictable, meaning parents make decisions based on the overall characteristics of the municipality rather than the specific characteristics of their children's cohort.

In the main specification, I include municipality and cohort fixed effects. This set of fixed effects allows us to compare adolescents living in the same area with differential exposure to municipality terrorist attacks during childhood while accounting for national shocks that occurred in a specific year. I find that terrorist attacks deplete the socioemotional skills and adversely impact risky health decision outcomes in adolescents exposed during childhood. Exposure to one more terrorist attack leads to a 0.046 SD increase in the total socioemotional problems, a 0.056 SD increase in the hyperactivity problems score, and a 4.2 percentage points (6.5%) increase in the probability of drinking alcohol with no significant reductions in the age at which they drink for the first time. These results are robust across various specifications, estimation methods, and sensitivity tests (detailed in section 5.5.4).

The identification strategy relies on the assumption that parents only sort across municipalities based on the general characteristics of the municipality, not on the specific characteristics of their child's cohort within the municipality. Several diagnostic analyses support our use of within-municipality cross-cohort variation in exposure to terrorist attacks. First, one potential challenge of the specification above is that the timing of birth could be endogenous. For example, parents who live in more violent municipalities might delay their

pregnancy, or they might be able to predict when the municipality is likely to experience more terrorist attacks, which would then affect their fertility decisions. To check whether this is a concern, I provide evidence that the rate of terrorist attacks does not change the number of births in the municipality. Moreover, I control directly for terrorist attacks in the pre-pregnancy period, and I find small and statistically insignificant effects for that period, while the main results remain unchanged. Second, I conduct balancing tests that examine whether, across cohorts, variation in terrorist attack exposure is uncorrelated with other time-varying municipality-level shocks. I find no evidence that violence levels are correlated with these shocks. Third, I perform balancing tests to examine whether the variation in violence exposure can explain differences in the characteristics and composition of the cohort. The results show no correlation between violence levels and the number of low birth weights or survival rates.

Finally, given the strong assumption regarding the timing of exposure to terrorist attacks, I perform a nonparametric nearest neighbor match analysis at the municipality level using the average rate terrorist attacks between 2000 and 2016. This alternative approach does not rely on the staggered design of violence affecting different cohorts or on the assumption that the same violent event yields different outcomes depending on the child's age at the time of exposure. Instead, it assigns all teenagers in a given municipality as either part of the treatment or control group. It compares their outcomes across municipalities while dealing with the endogeneity of violence. Although direct comparisons of point estimates between the two approaches are not feasible, the direction and statistical significance of the estimates remain consistent, suggesting the robustness of the results.

A key distinction of this work is that I can separate the violence exposure by age intervals (0-5 years and 6-9 years) and by length of exposure. First, the results suggest that violence after 5 years old is driving the results of alcohol consumption decisions, but early childhood exposure significantly affects socioemotional skills, consistent with previous studies (Cunha and Heckman, 2007; Heckman et al., 2013). Second, the results indicate that exposure to

violence for five or more years increases the probability of drinking, while exposure for two or more years increases the total difficulties and hyperactivity scores of the socioemotional test. These results suggest that prolonged exposure during childhood to violence might have long-lasting consequences. Given the literature on the relationship between risky health behaviors, socioemotional skills, and adulthood outcomes, these results underline significant policy concerns about effectively addressing these adverse effects.

This paper contributes to three strands of literature. The first is a set of studies on the impacts of conflict on sociemotional skills and health. While the literature shows that conflict negatively affects health outcomes (Akresh et al., 2012; Minoiu and Shemyakina, 2014; Shemyakina, 2021; Grossman and Khalil, 2022), psychological well-being (Blattman and Annan, 2010), and cognitive and sociemotional skills (Shany, 2023; Jürges et al., 2022) in the short-term (i.e., early childhood and childhood), this study focuses on medium-term (i.e., adolescence) effects similar to León (2012). Notably, it also provides evidence of a new set of outcomes and how adolescents are affected. Moreover, it sheds light on how their decision-making process changes, which could lead to long-term consequences.

The second set of studies is related to the effects of childhood experiences on young adulthood outcomes, mainly focusing on positive experiences and the impacts on education outcomes (Figlio et al., 2014; Bharadwaj et al., 2018). Previous studies have analyzed the effects of preschool programs like Head Start (Ludwig and Miller, 2007; Deming, 2009; Heckman et al., 2013), neighborhood quality (Chetty et al., 2016) or access to safety net programs (Hoynes et al., 2016). This paper contributes to this literature by exploring a prolonged negative experience and analyzing new outcomes. The results suggest that these negative experiences can outweigh the potential positive benefits from other inputs like those previously examined. This study highlights that policies aimed at improving children's adolescent outcomes should consider how to prevent and mitigate the adverse effects of traumatic experiences like violence.

Finally, it contributes to the literature on the impacts of conflict in developing countries

like Colombia, where resources to deal with the conflict and its consequences are limited. Previous evidence characterizes the effects of the armed conflict on infant birth weight (Camacho, 2008), child anthropometric measures (Kreif et al., 2022), and school performance and educational attainment (Ramirez Muñoz, 2015; Rodriguez and Sanchez, 2009, 2010). This paper adds to this literature by studying new outcomes (socioemotional skills and risky health behaviors) that are highly important due to their long-term consequences (Heckman et al., 2006; Mezza and Buchinsky, 2021) and are understudied in the context of developing countries.

The remainder of the paper is organized as follows. Background information and a prior literature summary can be found in section 2. Section 3 provides information on the data, and section 4 outlines the empirical strategy. Section 5 provides main results, heterogeneity analyses, robustness exercises, and a discussion. I conclude in section 6.

2 Background and Prior Literature

2.1 Armed conflict in Colombia

Colombia has experienced a long-lasting conflict over the past 60 years with two nonstate armed groups - the Revolutionary Armed Forces of Colombia (FARC from the Spanish acronym) and the National Liberation Army (ELN from the Spanish acronym) - founded in the mid-1960s. Initially, the guerrilla groups were located in rural areas where they could maintain territorial control by performing violent actions against the population and infrastructure. However, they tried to expand their territory and control new areas over several decades. In the 1990s, the conflict escalated due to the guerrillas' illegal drug trafficking and consolidation of the United Self-Defense Groups of Colombia (AUC from the Spanish acronym). The confrontation with these groups dominated the 2002 presidential election in which Álvaro Uribe was elected president. Among his policies was his flagship policy *Política de Seguridad Democrática* (Democratic Security Policy), which included significant

military expenditure to combat the armed groups. While the guerrilla withdrew to remote areas between 2000 and 2012, following a failed peace process initiated by President Andrés Pastrana in 1999, terrorist attacks continued to target military and civilian buildings and infrastructure to maintain territorial control. Since the beginning of the conflict, around 9 million people have been registered as victims of the armed conflict.[9]

During the 2000s, violence remained prevalent across Colombia, with significant regional variation. Panel A in Figure 1 shows the average number of terrorist attacks per municipality between 2000 and 2016, while Panel B shows the rate of terrorist attacks per 100,000 inhabitants over the same period. Municipalities in black indicate areas more heavily affected by terrorist attacks, primarily in the Pacific region.[10] The Figure highlights two important features of the Colombian conflict. The figure highlights two key features of the Colombian conflict. First, it illustrates the persistently high levels of terrorist attacks during this period and the stark regional differences in the behavior of armed groups, with some regions disproportionately affected. Second, it emphasizes the importance of accounting for population size when analyzing the intensity of exposure to terrorist attacks. For instance, while Bogotá appears darker in Panel A due to the absolute number of attacks, it is shown in light gray in Panel B after adjusting for population. Consequently, this paper uses the rates of terrorist attacks, that account for population size, to better capture the intensity of exposure to terrorist attacks.

2.2 Prior Literature

2.2.1 Reasons to engage in risky health behaviors

The evidence on the impact of adverse childhood experiences (ACE) on risky health behaviors is very limited in the economic literature. The studies have focused mainly on the

[9]Data available from the National Information Network of the Unit for the Victims Assistance and Reparation. Data retrieved from https://www.unidadvictimas.gov.co/es/registro-unico-de-victimas-ruv/37394 on March 9, 2022.

[10]San Andrés and Providencia are not included in the graph as it is located in the insular region

contemporary factors that induce youth to smoke, drink, or engage in risky sexual health behaviors (Cook and Moore, 2001; Gruber and Zinman, 2001; Levine, 2001; Cawley and Ruhm, 2011). One possible explanation is that youth adopt these behaviors as coping mechanisms in response to distressing life events (Friedman, 2020) or adverse events Shonkoff et al. (2012). This implies that children exposed to violence, for instance, might resort to smoking or alcohol consumption as a coping mechanism to deal with the associated stress.

The evidence suggests that ACEs have long-term negative consequences on adult outcomes. Indeed, exposure to violent situations affects the body and mind's development, particularly during early childhood when the brain's structure and functioning develop continuously (National Scientific Council on the Developing Child, 2015, 2011). This increased sensitivity to change during early childhood is attributed to the brain's plasticity (National Scientific Council on the Developing Child, 2015). Consequently, situations that generate fear and anxiety, such as armed conflict, cause damage to the structure and architecture of the brain (National Scientific Council on the Developing Child, 2010).

Mainly, prolonged exposure to stress affects the prefrontal cortex development, which begins during early childhood and continues throughout adolescence and early adulthood (Arain et al., 2013). This area of the brain plays a critical role in regulating the development of executive functions and responses to emotional stimuli National Scientific Council on the Developing Child (2015, 2010); Shonkoff et al. (2012). The adverse effects of such interference can render adolescents more susceptible to engaging in risky health behaviors, especially those with a low perceived coping efficacy, as they may struggle to control their impulses (Arain et al., 2013; Asselmann et al., 2016). The intensity of ACE exposure is associated with an elevated risk of behavior problems (Burke et al., 2011). For instance, Dube et al. (2006) find that individuals who experience ACEs are significantly more likely to start drinking alcohol by age 14.

2.2.2 Consequences of violence

Previous research has found evidence of the adverse effects of conflict on health (Akresh et al., 2012; León, 2012; Minoiu and Shemyakina, 2014; Shemyakina, 2021) and psychological well-being (Blattman and Annan, 2010). However, accurately estimating the causal effects of armed conflict is challenging for several reasons. First, identifying victims of violence can be difficult due to confidentiality issues. For this reason, self-reports in surveys are often used, leading to potential non-random measurement error, recall bias, or reluctance to share experiences to avoid revictimization (Ellsberg et al., 2001). For this reason, I use the violence levels at the municipality level reported by the National Information Network. Second, violent victimization is not random, as armed groups seek control over strategic regions to finance their activities. Consequently, areas, where armed groups can gain political power or control of rent extraction, are more likely to experience violent events (Centro Nacional de Memoria Histórica, 2013; Fernández et al., 2014). Therefore, isolating the causal effect of violent crimes from other influencing factors at the individual, community, or municipal level can be challenging. To address this, rather than comparing different municipalities, I analyze cohorts within the same municipality that have been exposed to varying levels of violence.

The economics literature has focused on two main topics: (i) estimating the causal effects of conflict on health, education, and psychological well-being in the short-term, and (ii) estimating the long-term effects of "positive" interventions like preschool programs. More recently, the literature has started to analyze the impact of "negative" environments on medium-term and long-term outcomes. For instance, Jürges et al. (2022) find that parental exposure to conflict has adverse long-term effects on educational attainment, with non-cognitive skills playing a key role in these outcomes. However, the impact of children's direct exposure to conflict during childhood on their adolescent outcomes remains unknown. Moreover, Manian (2021) shows that conflict leads to an increase in risky sexual behavior (such as unprotected sex) among adults and that behavioral responses can mitigate the

negative effects of conflict by enhancing risk aversion. Finally, the empirical literature on long-term effects focuses on chronic diseases (Allais et al., 2021; Di Maio and Sciabolazza, 2021).

3 Data

For this study, I use two sources of information: (ii) the 2010 and 2016 Waves of the Colombian Longitudinal Survey (ELCA) and (ii) the Municipal Panel of the Center for Studies on Economic Development (CEDE).

3.1 Colombian Longitudinal Survey

The ELCA is a nationally representative longitudinal survey that follows households (strata 1 to 4) since 2010 and their members residing in urban areas across five regions: Atlantic, Eastern, Central, Pacific, and Bogotá. It collects information on household composition, expenses, income, and caretaker characteristics. The analysis sample includes 870 adolescents aged 13 to 16 residing in 832 households. The sample includes children among the specified age range for two reasons. Firstly, the evidence indicates that the typical onset of alcohol consumption among Colombian children is around age 12 (de la Espriella Guerrero et al., 2016).[11] Secondly, the survey design excludes any adolescent older than 16 from the comprehensive questionnaire, resulting in a lack of information on risky behaviors and socioemotional skills for individuals in this age bracket.[12].

This study uses information collected from the survey on socioemotional skills and risky health behaviors. First, the survey includes information on socioemotional skills, assessed using the Spanish-approved version of the Strengths and Difficulties Questionnaire (SDQ), a brief behavioral screening questionnaire for children up to 17 years old. The SDQ measures

[11] Consistent with this, only 23% of the children 12 or below report having tried alcohol compared to 64% of those older than 13.

[12] See Online Appendix A for a discussion of how the sample was selected. Also, for more information on the questionnaires or data access, see https://encuestalongitudinal.uniandes.edu.co

the total number of difficulties, allowing analysis across four distinct components: Emotional symptoms, conduct problems, hyperactivity/inattention, and peer relationship problems.[13] The SDQ operates on a scale ranging from 0 to 40 points, with each component scored out of 10 points. Higher scores indicate a higher degree of problems. The total score and each component are used as the outcomes in this paper.

Second, the risky health behaviors information includes questions on alcohol consumption, personal smoking habits, and the smoking habits of friends. These questions are self-reported. To mitigate potential measurement errors during the survey, parents are not allowed in the room when the respondents provide their answers to these questions. The survey team took this precaution because teenagers tend to offer less accurate information when their parents are present.[14]. This paper uses 4 outcome variables based on this data: (i) binary indicator of whether the respondent has tried alcohol, (ii) age of first drink, (iii) binary indicator of whether the respondent smokes, and (iv) binary indicator of whether the respondent's friends smoke.

Table 1, Panels A, B, and C provide summary statistics for the adolescents in the sample and their households. Notably, there is little variation in adolescents' characteristics except in their education levels. In contrast, household and caretaker characteristics exhibit more variation, particularly concerning variables such as household size, expenditure, and caretakers' education level. Additionally, there are no significant differences across cohorts in adolescent (except age), household, and caretaker characteristics, which are necessary to ensure the cohorts are comparable (see Online Appendix Table C.1). Similarly, no significant differences in characteristics are observed across regions (see Online Appendix Table C.2).

[13]It is also possible to diagnose externalizing problems (conduct and hyperactivity scores) and internalizing problems (emotional and peers score)

[14]When parents cannot leave the room or refuse to, the enumerator gives the respondent a card to signal their answers to each question without speaking aloud.

3.2 Municipal Panel

The Municipal Panel of the Center for Studies on Economic Development (CEDE) provides data on various indicators categorized by subject (e.g., General Characteristics, Conflict, and Violence). The violence data comes from official reports of the National Information Network between 2000 and 2012. The data includes several forms of violence, including terrorist attacks, the primary measure of exposure to conflict in this study. Based on this data, two measures of terrorist attack exposure are constructed. First, the average rate of terrorist attacks per 100,000 inhabitants in the municipality when the children were between 0 and 9 years old. This measure accounts for population size and considers that larger municipalities may experience more terrorist attacks. Still, the adolescent may not have been exposed. I provide specification checks using only the smaller municipalities where children are more likely to be exposed to a municipality-level shock. Second, the number of years that an adolescent was exposed to at least one terrorist attack during her first nine years.

Additionally, supplementary data regarding the municipality includes the rurality index and the Unsatisfied Basic Needs (UBN) of the urban areas within the municipality.[15] These variables were obtained through the National Administrative Department of Statistics (DANE), the Geographic Institute Agustín Codazzi (IGAC), or calculated by the CEDE using primary information.

The ELCA conducted interviews with adolescents across different municipalities in Colombia, each facing varying levels of conflict. Table 1, Panel D provides summary statistics for the municipalities within the sample. The table underscores the predominantly urban nature of these municipalities, as evidenced by the low rurality index. This is consistent with the sample selection process, as the ELCA sample exclusively covers households living in urban areas. Additionally, the municipalities are close to their respective department capitals

[15]The UBN is an index that contains four dimensions: housing and related indicators, water and sewage indicators, education and associated indicators, and income-related indicators

and display lower levels of Unsatisfied Basic Needs. The table indicates that the sample is skewed towards more urbanized areas, emphasizing that the study results apply solely to urban households in Colombia. Regarding violence levels, homicides are the most prevalent form, with terrorist attacks also prevalent, albeit with variations across different municipalities.

Due to data restrictions, the specific municipalities included in the sample are not disclosed. Therefore, the results are presented at the regional level, with the distributions of raw variation in violence levels shown where possible. Panel A in Figure 2 shows the average rate of terrorist attacks per 100,000 inhabitants for municipalities in the sample across five regions of the country by year. This panel highlights two significant findings. First, as expected, there is substantial variation in violence levels across regions. Second, no national trend suggests that the conflict disproportionately impacted any specific cohort compared to others.[16] Furthermore, Panel B illustrates the distribution of the average rate of terrorist attacks by municipality, while Panel C shows the within-municipality standard deviation of the rate. These panels emphasize that, while terrorist attacks are a relatively rare form of violence, most municipalities in the sample experienced at least some attacks. Additionally, they highlight the significant variation in the frequency of these attacks over time. Both panels also indicate that one municipality experienced a substantially higher number of terrorist attacks. In the results section, I will present a sensitivity analysis demonstrating that the inclusion of this municipality does not drive the findings.

3.3 Preliminary checks

Before estimating the impacts of the rate of terrorist attacks an adolescent was exposed to between 0 and 9 years old on socioemotional skills and risky health behaviors, I provide some

[16]The absence in differences across cohorts could be explained by differences in levels. Online Appendix Figure C.1 depicts the average rate of terrorist attacks per 100,000 inhabitants experienced by each cohort in each region without adjusting for differences in levels across municipalities, while Online Appendix Figure C.2 estimates the average of the demeaned rate of terrorist attacks, accounting for these level differences. Both figures suggest that, even after adjusting for these differences, violence levels still vary across cohorts.

preliminary descriptive evidence. Figure 3 illustrates the relationship between the rate of terrorist attacks an adolescent was exposed to between 0 and 9 years old and the two main outcomes. The figure shows the residualized means of the rate of terrorist attacks and of each outcome, conditional on municipality and cohort fixed effects. Specifically, it compares adolescents living in the same area with differential exposure to municipality terrorist attacks during childhood while accounting for national shocks that occurred in a specific year. Panel A suggests that adolescents exposed to a higher frequency of terrorist attacks in their first nine years of life tend to obtain higher scores in the total difficulties score, indicative of a potential depletion in their socioemotional skills. Panel B demonstrates a similar pattern for alcohol consumption as the percentage of adolescents who report having started drinking alcohol is positively correlated with exposure to terrorist attacks during childhood.

4 Empirical Strategy

To analyze the impact of terrorist attack exposure on socioemotional skills and risky health behaviors, I combine the ELCA with the Municipal panel. The estimations do not leverage the panel structure of the ELCA, given that the outcomes are solely available in the 2016 wave. Instead, the panel structure is exclusively used to control for baseline characteristics and to create measures of terrorist attack exposure during childhood (from 0 to 9 years old for each child), based on the adolescents' municipality of residence in 2010 and their birth year. Terrorist attack exposure variation stems from two different sources: the individual's birth year and the municipality of residence in 2010. Panel A in Figure 2 displays the variation in the levels of violence experienced by each cohort. Most of the variation comes from the first and last year, as the four cohorts are staggered, and the adolescents were born only one year apart.

To estimate the average causal effect of terrorist attack exposure on socioemotional skills and risky health behaviors, I estimate the following baseline two-way fixed effects specifica-

tion, using OLS:

$$y_{imt} = \beta_0 + \beta_1 V_{mt}^{0-9} + \beta_1 V_{mt}^{10+} + \mathbf{X}_{imt}\beta_3 + \mathbf{Z}_{imt}\beta_4 + \mathbf{C}_{imt}\beta_4 5 + \mu_m + \delta_t + \varepsilon_{imt} \quad (1)$$

where y_{imt} is one of the outcomes available in the ELCA for adolescent i in municipality m from cohort t. V_{mt}^{0-9} represents the average rate of terrorist attacks per 100,000 inhabitants in the municipality m experienced by adolescents in cohort t during their childhood. V_{mt}^{10+} represents the average rate of terrorist attacks per 100,000 inhabitants in the municipality m experienced by adolescents in cohort t experienced after 10 years old. $\mathbf{X}_{imt}$ is a vector of individual-level controls such as gender, educational level, order within the children in the household[17]; $\mathbf{Z}_{imt}$ is a vector of household-level controls including logarithm of consumption, whether the household is a two-parent household, and household size; $\mathbf{C}_{imt}$ is a vector of caretaker-level controls including age and years of education. μ_m are municipal fixed effects, and δ_t are cohort fixed effects. The standard errors are clustered at the municipality level to account for serial correlation within each municipality.

Comparing adolescents across municipalities would be inappropriate due to concerns surrounding the non-random nature of municipal violence, as explained in section 2.2.2. The two-way fixed effects model presented above is used to address this issue. Including municipality-specific fixed effects μ_m accounts for systematic differences between municipalities and their prevalence of armed conflict. Consequently, these fixed effects ensure that the identification stems from within-municipality variations. Simultaneously, cohort-specific fixed effects account for shocks occurring in a specific year (i.e., national-level shocks). Hence, both sets of fixed effects are included to identify the causal effects of an adolescent's exposure to terrorist attacks in a given municipality compared to other adolescents in other cohorts in the same municipality that experienced different levels of terrorist attacks. With this specification, the parameter of interest, β_1, measures the impact on socioemotional skills

[17]This variable is an ordering of the children in the household from eldest to youngest. This means that the oldest child is assigned one and so with every child until reaching the last one

and risky health behaviors of the average exposure to terrorist attacks during childhood.

However, given that the two-way fixed effects model relies on a strong assumption, I perform a nonparametric nearest neighbor match analysis at the municipality level using the average terrorist attacks between 2003 and 2013. For this, municipalities are assigned to the treated group if the average rate of terrorist attacks between 2000 and 2013 is greater than the median and to the control group otherwise. This approach does not rely on the staggered design of how violence affects different cohorts, and it does not rely on the assumption that the same violent event leads to different results depending on the child's age at the moment of exposure. Instead, this approach assigns all teenagers in a given municipality to the treatment or control group and compares teenagers across municipalities while dealing with the endogeneity of the violence. In particular, it matches individuals across municipalities based on individual, household, and municipality characteristics.

Identification

The goal of estimating Equation 1 is that β_1 will identify the causal effect of terrorist attacks. The identification strategy relies on the premise that while parents may base decisions on the general characteristics of a municipality, they do not do so based on the specific characteristics of their child's cohort within the municipality, including the level of violence their child might experience. Conditional on municipality and cohort fixed effects, within-municipality variation in violence levels is not correlated with other factors (observed and unobserved) affecting the studied outcomes. One feature of terrorist attacks is their unpredictable nature, even for military forces, and their inherent element of surprise, which provides ex-ante support for identification. Indeed, these events catch the population off guard and should have substantial effects.

The success of the main specification presented in Equation 1 depends on three key factors. Second, to obtain precise estimates, there must be sufficient variation in the exposure to terrorist attacks after controlling for cohort and municipality fixed effects. Table 2 exam-

ines the extent of variation in exposure to terrorist attacks before and after accounting for these fixed effects. As expected, removing the fixed effects reduces the standard deviation in the rate of terrorist attacks by over 80 percent. Therefore, the effect estimates in this paper are based on small changes in exposure. Despite this reduction, there remains sufficient variation to estimate the effects of these small changes in exposure with relative precision, as the results presented later in the paper demonstrate.

Second, in order to make causal interpretations of the estimates, within-municipality variation in terrorist attacks must be uncorrelated with differences time-varying municipality-level shocks. If these variables are uncorrelated, the analysis supports the premise that municipality and cohor fixed effects capture any systematic selection on observables. For this reason, I regress the average municipality-level characteristics on the average rate of terrorist attacks experienced by each cohort during childhood, controlling for cohort fixed effects and municipality fixed effects. Panel A in Table 3 shows that the variation in the exposure to terrorist attacks is not correlated with the variation of the characteristics at the municipality level.

Third, the variation the within-municipality variation in terrorist attacks must be uncorrelated with differences in demographic characteristics across cohorts. For this reason, I regress the average number of births, number of low birth weights and number of deaths under age of four on the average rate of terrorist attacks experienced by each cohort during childhood, controlling for cohort fixed effects and municipality fixed effects. Panel B in Table 3 shows that the composition and characteristics of the cohorts are not correlated with the variation in the exposure to terrorist attacks.

However, recognizing the potential threat to identification, I address it in several ways. First, the timing of birth could potentially be endogenous, driven by factors such as parents in more violent municipalities delaying pregnancy or being able to predict periods of increased terrorist attacks, influencing their fertility decisions. In Figure 4, I show the impact of the rate of terrorist attacks six years prior and after on the number of births in a given year. For

instance, the number of children born in 2000 is regressed on the rate of terrorist attacks each year between 1994 and 2006. The findings indicate that prior violence in the municipality does not influence the number of births, suggesting that parents are not adjusting the timing of deliveries in response to violence levels.[18]

Second, I test the sensitivity of the estimates to different ways of controlling for differences between cohorts. This involves incorporating either cohort-by-region fixed effects or neighborhood fixed effects. The cohort-by-region specification leverages within-region variation in the timing of terrorist attacks across municipalities, accounting for region-level shocks or policies influencing a cohort's outcomes. The neighborhood fixed effects specification considers shocks experienced by adolescents in the same neighborhood that might impact their outcomes. In both sets of specifications, the main estimates are similar. Furthermore, I explore whether excluding the cohort fixed effects and only controlling for age changes the results. However, the results do not show significant changes.

Third, sensitivity tests are conducted to address any concerns regarding omitted factors influencing the results. Specifically, I estimate two alternate specifications: i) limiting the sample to municipalities with a predicted propensity for terrorist attacks within the range of [0.1, 0.9], based on their time-invariant characteristics; ii) excluding the four largest cities in the country from the main specification. These results are also similar to those obtained from the main specification.

Fourth, the rate of terrorist attacks is constructed using the municipality of residency in 2010. However, parents may adapt to violence levels by migrating from more violent to less violent areas. For this reason, I perform a set of analyses where terrorist attack exposure is constructed using the birthplace. As will be discussed in the next section, the results are robust to this adjustment.

Lastly, given that the sample only includes four cohorts, it implicitly assumes that the

[18]Violence could also impact the survival rate of children born in each cohort. Panel A in Online Appendix Figure C.3 shows the survival rate of children born in each cohort over time. Panel B shows no significant correlation between the survival rate and the rate of terrorist attacks during childhood.

timing of exposure to the same violent event yields different results contingent on the child's age at the moment of exposure. Although direct testing of this assumption is not feasible with the available data, as discussed in section 2.2.2, the brain's structure and functioning develop continuously throughout early childhood. Due to its plasticity, the brain is much more sensitive to changes during this period (National Scientific Council on the Developing Child, 2015). Previous research on safety net programs exposure during childhood has assumed and showed that the impact of these programs changes depending on the age of exposure (Hoynes et al., 2016; Bailey et al., 2024), which is also consistent with previous findings in the early childhood literature (Heckman and Rubinstein, 2001). Consequently, the timing of exposure is likely to be a crucial factor, with potentially more severe consequences for younger children actively undergoing developmental processes and possessing more plastic brains (National Scientific Council on the Developing Child, 2010).

5 Results

In this section, the estimated causal effects of exposure to terrorist attacks during childhood on socioemotional skills and risky health behaviors are reported using OLS. Unless otherwise noted, all analyses in this paper utilize the preferred specification given by Equation 1.

5.1 Main Results

Table 4 reports that exposure to terrorist attacks during childhood significantly depletes socioemotional skills among Colombian adolescents living in urban areas. All the columns show the baseline specification from Equation 1, which includes cohort and municipality fixed effects. Odd columns do not include controls, while even columns do. Panel A presents the estimates obtained from Equation 1. Column 2 in this panel shows that, on average, exposure to one additional terrorist attack during childhood leads to a 0.046 SD (0.25 points) increase in the total socioemotional difficulties score of the Strengths and Difficulties Questionnaire.

In contrast, the estimate for terrorism exposure during early adolescence is not statistically signficant. Notably, this result is mainly driven by the hyperactivity domain score, which increases by 0.064 SD (0.14 points) as shown in Column 4. These effects are smaller than the previously reported in the literature Jürges et al. (2022). However, this paper does not analyze direct victimization as in previous papers. Therefore, the estimates should be smaller. No significant effects are observed on the other dimensions of the SDQ score. These findings are consistent with the notion that terrorist attack exposure in a sensitive period, like childhood, interferes with the proper functioning and development of the brain. Hence, the exposure leads to a depletion of skills including socioemotional. Panel B in Figure 4 presents the nearest neighbor match design results and also suggests a depletion in socioemotional skills due to exposure to violence during childhood. Although comparing the magnitude of the results between the fixed effects approach and the neares neighbor match is design is not plausible, the direction of the effects is the same and are statistically signficant.

Column 2 in Table 5 shows that, on average, the probability of drinking increases by 4.0 percentage points with one additional terrorist attack during the first years of life. Recognizing that exposure to terrorist attacks may alter the age at which individuals first consume alcohol, Column 3 indicates that there are no significant reductions with exposure to one additional terrorist attack during childhood. However, the results are noisy and do not indicate that the effects are precisely estimated. Additionally, Online Appendix Table C.3 shows no significant effects on smoking behavior, both concerning the teenagers' decisions and their friends when using the two-way fixed effects. In contrast, the nearest neighbor match design suggest that both probabilities increase with violence exposure. These findings are consistent with the notion that terrorist attacks instill fear and anxiety in the people living in the municipality, prompting them to engage in risky health behaviors. As previously mentioned, the direction of the effects of both estimation approaches is the same and are statistically signficant.

As explained in section 3.3.2, there is one municipality that experienced a substantially

higher number of terrorist attacks. Therefore, to ensure that the results are not driven by a single municipality, Appendix Figures C.4 and C.5 show the leave-one-out coefficient estimates for all total difficulties score and the probability of drinking. In particular, each regression is estimated omitting one municipality in each iteration—all which demonstrate similar findings to the main results. The municipality with the highest number of terrorist attacks corresponds to the last estimate on the right side of each panel.

One concern is whether the choice of fixed effects in the main specification drives the results. Section 5.5.4 discusses the results of the specification checks and tests performed in more detail. Nevertheless, if the specification drove the results, alternative forms of violence should yield similar results. To explore this, the average rate of homicides per 100,000 inhabitants during childhood for each cohort was constructed. As shown in Online Appendix Table C.4, there are no significant effects of exposure to homicides during childhood on socioemotional skills. Similarly, Online Appendix Table C.5 shows no significant effects on both alcohol-related outcomes. These findings suggest that the specification is not driving the main results. There are three plausible explanations. First, terrorist attacks are more likely to create panic and fear at the municipal level, even among those not directly affected, as they often target civilian buildings, general infrastructure, and military forces. Second, while homicides and other forms of violence are more common, they typically target specific individuals or small groups. Consequently, they are less likely to directly or indirectly affect the children not involved. Third, the surprising nature and unpredictability of terrorist attacks make people more likely to be negatively affected by them as they are caught off guard.

5.2 Non-Linear Effects

This section explores the non-linearities in the effects of terrorist attacks on socioemotional skills and alcohol consumption. Two different measures of non-linearity are constructed. First, the rate of terrorist attacks is binned into deciles. This measure assesses whether the

impacts of exposure are stronger with increased exposure levels. Second, for each cohort, the number of years during childhood that the adolescent was exposed to terrorist attacks is constructed. This measure assesses the long-term exposure, which may be more closely related to the fear and anxiety generated by conflict discussed in section 2. Specifically, the longer children are exposed, the more likely they are to develop increased fear and anxiety about their future.

Figure 5 presents the non-linearities on the socioemotional skills scores. Panel A shows that the coefficient estimates for higher deciles seem larger than those for the lowest deciles. However, none of these results are statistically significant. Therefore, it is unclear whether the increased exposure severity depletes socioemotional skills. Panel B presents the results for the years exposed to terrorist attacks. In this regression, the number of attacks over the year changes; any year with any attack is included in the estimation. The magnitude of the effects increases with the duration of exposure. Specifically, exposure for two or more years increases the total difficulties and hyperactivity scores. Moreover, the effects on hyperactivity imply that exposure for 5 or more years also depletes socioemotional skills.[19] These results highlight that most of the effect on socioemotional skills is through hyperactivity.

Figure 6 presents the non-linearities in the alcohol consumption outcomes. Panel A shows that the magnitude of the effects on the probability of drinking increases with the severity of exposure. However, the results concerning the age of the first drink are notably noisier, likely attributed to the smaller sample size, making it unclear how the severity of exposure influences this outcome. Panel B presents the results for the years exposed to terrorist attacks. The magnitude of the effects increases with the duration of exposure. Specifically, exposure for five or more years increases the probability of drinking. These results underscore the significance of childhood and how exposure for an extended period might have long-term consequences.

Overall, the results suggest that both severity and duration of exposure induce more

[19] Online Appendix Figure B.1 presents the results for the other components.

substantial adverse effects in adolescents affected. Given the existing literature on the impacts of risky health behaviors and socioemotional skills on adulthood, these results raise essential policy concerns about the future consequences on the lives of affected children as they transition into young adulthood and adulthood.

5.3 Results by periods of life

The results concerning the duration of exposure highlight that when exposure starts in early childhood, the impacts are more pronounced. Consequently, this section explores whether shocks experienced in early childhood (0-5) shocks have stronger effects than those experienced later in childhood (6-9).[20] Parsing the impacts in this way allows testing if the primary mechanism through which the violence influences the outcomes is by worsening the home environment or noncognitive skills of young children due to the fear generated. If this hypothesis holds, the impacts of terrorist attacks should be larger during the earlier period (0-5 years old). As in the main specification, the estimates are interpreted as the impact of the exposure to one additional terrorist attack on the main outcomes but separately for each period of life.

Table 6 provides suggestive evidence[21] that exposure during early childhood depletes socioemotional results. Specifically, on average, experiencing one more terrorist attack increases the total difficulties score by 0.058 (Column 2) and the hyperactivity score by 0.044 (Column 4).[22] These results are consistent with the evidence that early childhood shocks have long-term consequences on the socioemotional skills development process (Cunha and Heckman, 2007; Ludwig and Miller, 2007; Deming, 2009; Almond et al., 2018). More importantly, the results underscore the importance of implementing programs and policies in conflict-affected settings to mitigate the negative effects on children exposed early in life

[20] Bastian and Michelmore (2018) and Bailey et al. (2020) use a similar approach to analyze the effect of the Earned Income Tax Credit (EITC) and Food stamps

[21] As explained in section 4, I assume that the timing of exposure to the same violent event leads to different results and has differential importance for the children. This assumption is even stronger in this analysis.

[22] Online Appendix Table B.1 presents the results for the other components.

(Sánchez-Ariza et al., 2023).

Table 7 presents mixed evidence regarding the impact of early childhood shocks. Column 2 provides weak evidence suggesting that early-on shocks do not appear to increase the probability of drinking, while violence exposure during childhood appears to increase it. This result is surprising given the previous evidence on how early childhood environment affects future outcomes. However, it also highlights that exposure to violence matters at the time when the children are first deciding whether to engage in risky health behaviors. Therefore, this could explain why exposure matters when it happens later in life. However, in Column 4, the results for the age of the first drink are not statistically. Due to the limited sample size for this outcome, I lack the statistical power to test if the estimators differ significantly.

Finally, to address the concerns about the assumption related to the timing of the exposure, I estimate the effects using different age cutoffs instead of 5. Figure C.6 shows that most coefficients are significant, indicating that the total difficulties score and the probability of drinking increase, mainly when the early childhood years are included. Notably, the figure suggests a lack of impact when exposure occurs for only a few years, consistent with the results on the duration of exposure discussed earlier.

5.4 Robustness checks and Alternative Specifications

This section provides a brief summary of a number of robustness checks and alternative specifications estimated to address several concerns about the main specification.

Robustness

The initial three specification checks test whether the results are robust to different ways of controlling for differences across cohorts. The first check includes a cohort-by-region fixed effect that controls for region-specific shocks instead of accounting for national shocks. It is important to note that including the cohort-by-municipality fixed effect, which is the ideal,

is not plausible as the variation in terrorist attack levels comes from the within-municipality cross-cohort variation. Furthermore, in this specification, the sample size decreases as the children living in Bogota are excluded because it is both a municipality and a region. The second check excludes the cohort-fixed effect and controls for age only. Finally, the last specification check includes a neighborhood fixed effect that accounts for shocks experienced by adolescents living in the same neighborhood that might influence their outcomes. Figures 7 and 8 present the results of these robustness checks.[23] Following the main result (i.e., the main specification), the next three estimates demonstrate the insensitivity to the choice of fixed effects.[24]

The fourth specification check addresses the concern of whether terrorist attacks in the municipality should impact children in big metropolitan areas. In these sizable cities, a terrorist attack might predominantly affect the children living in the area it took place, rather than affecting all children throughout the city. To address this concern, I restrict the sample to the municipalities with less than 1 million residents, which excludes the country's four largest cities (Bogotá, Medellín, Cali y Barranquilla). However, doing this reduces the sample size further, potentially impacting the significance of the results and potentially diminishing the estimates' statistical power. The fifth estimate in each panel in Figures 7 and 8 show that the estimates are not sensitive to excluding big cities.

Fifth, within the sample, 13.9% of the children migrated from their birthplace to another location. This notable migration percentage highlights the need to consider migration, which could affect the results. Notably, in Colombia, individuals often migrate from more rural and high-intensity conflict areas to urban and less intense conflict areas. Consequently, the average rate of terrorist attacks is recalculated using the birthplace rather than the municipality of residence in 2010. The main specification outlined in 1 is then re-estimated

[23]Online Appendix Table B.2 presents the results for the other components.

[24]Due to the survey design, some municipalities contain only a single neighborhood. In these cases, neighborhood and municipality fixed effects are identical. Therefore, I restrict the neighborhood fixed effects analysis to municipalities with multiple neighborhoods, which may explain the lack of significant results, as the sample size decreases.

using this new rate of terrorist attacks. The sixth estimate in each panel in Figures 7 and 8 show that the estimates are not sensitive to accounting for migration patterns using the birthplace.

Finally, the results are robust when using the cumulative rate of terrorist attacks and changing the weights. The seventh estimate ("Cumulative Rate") in each panel in Figures 7 and 8 re-estimates the main specification outlined in 1 using the cumulative rate of terrorist attacks experienced by adolescents during childhood. It shows bigger effects when using the cumulative rate instead of the average rate, but the direction is the same. "Unweighted" indicates no weights are used in the regression using the main specification outlined in Equation 1. The results are slightly different, but given that the survey is representative of the country, weights should be accounted for as the main specification does.

Alternative Specifications

There are two main concerns about the main specification. First, whether it drives the results, which will be addressed with the robustness checks, and some evidence against it was provided in the homicides analysis presented earlier. Second, given the difference-in-differences design, whether the appropriate control group was chosen is even more critical for this paper for two reasons: (i) the choice of fixed effects and (ii) the strong assumption on how the variation in the timing of the exposure of the terrorist attack is used. In particular, not having a good control group, I cannot fully capture the unobservable factors, such as a municipality being more likely to experience violence or differences across cohorts.

Therefore, in addition to the nearest neighbor match designed discussed above, another alternative specification is estimated to test the results' sensitivity to the control group's choice. Following (Jacobson and Royer, 2011), the predicted propensity for terrorist attacks is calculated using time-invariant characteristics of the municipalities. Then, the sample is restricted to the municipalities with propensities of violence between 0.1 and 0.9. This approach guarantees that the observations left correspond to more comparable places, at

least on their violence levels. Using this new sample, the main specification outlined in 1 is re-estimated.

The last estimates in Figures 7 and 8 represent the specification checks. "P Matching" indicates that the sample is limited to the municipalities with propensities of violence between 0.1 and 0.9, as explained before. The results suggest the same direction of the effects, but some of the point estimates are smaller. Also, the confidence intervals are wide, which is related to the fact that this analysis is restricted to municipalities with propensities of violence between 0.1 and 0.9, which reduces the sample size considerably. However, overall, the results are consistent with those found using the preferred specification.

5.5 Heterogeneous results

Having shown that exposure to violence during childhood impacts socioemotional skills and risky health behaviors, this section explores heterogeneity in these estimates across gender, caregivers' education level, household composition, and household income. Figure 9 shows that the detrimental impacts on socioemotional skills do not differ across any of the variables analyzed. Notably, it appears that males, individuals with more educated caregivers, and those living in low-income households are the most affected. However, the differences between the coefficients are not statistically significant, hence, these findings are suggestive evidence.[25]

Figure 10 shows that the probability of drinking alcohol (Panel A) increases for females and those living in low-income households with exposure to terrorist attacks. However, the differences between these coefficients and those of males and high-income households are statistically insignificant. Even though these findings are suggestive evidence, they provide an interesting pattern. Specifically, men drink more (67.6%) than women (60%), but the exposure to conflict appears to trigger more alcohol consumption. Moreover, exposure prompts consumption at even earlier ages (Panel B), which has even worse long-term consequences due to its persistence and effects on health.

[25] Online Appendix Figure B.3 presents the results for the other components.

5.6 Placebo test

To verify the validity of the empirical strategy, I check whether the average rate of terrorist attacks between 2 and 7 years before the children's birth year affects the outcomes. The year immediately prior is excluded because it is the in-utero period, and the evidence has shown that in-utero exposure to violence has negative consequences on the children's development (Camacho, 2008). Therefore, the following equation is estimated:

$$y_{imt} = \beta_0 + \beta_1 V_{mt}^{2-7 \text{ before}} + \mathbf{X}_{imt}\beta_2 + \mathbf{Z}_{imt}\beta_3 + \mathbf{C}_{imt}\beta_4 + \mu_m + \delta_t + \varepsilon_{imt} \quad (2)$$

The coefficient of interest is also β_1, which captures the effect of the terrorist attacks before the teenager was born. Tables 8 and 9 show the results of the placebo test on socioemotional skills and alcohol-related outcomes. The point estimates are smaller than the main effects in Tables 4 and 5, and not statistically different from zero. Overall, there are no significant effects, which indicates that terrorist attacks occurring before birth do not affect the outcomes of the adolescent.[26]

6 Conclusion

This paper extends the literature on the impact of exposure to conflict during childhood on medium outcomes by investigating previously unstudied medium-term effects on socioemotional skills and risky health behaviors during adolescence which are a new set of outcomes. The findings suggest that exposure to violence has significant and lasting consequences for children's socioemotional skills and risky health behavior. Notably, the severity and duration of the exposure are key to understanding these adverse effects. The results also underscore that exposure earlier in life has worse consequences and affects even more medium-term outcomes. Overall, these results highlight the importance of childhood and how exposure for an extended period and high intensity might have long-term effects.

[26] Online Appendix Table B.2 presents the results for the other components.

While the paper has limitations regarding data quality and endogeneity concerns, the results provide valuable insights into the impact of terrorist attacks in countries like Colombia, where violence has been pervasive for many years. Since 2000, over 43 countries around the globe have experienced civil war and violence (Marshall, 2020), and understanding how to mitigate the negative effects of those conflicts is of first-order importance. Public discussions center on the economic consequences of the armed conflict, but less is known socioemotional skills and risky health behaviors during adolescence. In particular, the results indicate that exposure to violence can alter children's life trajectories, with negative implications for their health, education, or employment outcomes.

Finally, given the literature on the impacts of socioemotional skills and risky health behaviors on adulthood, these results raise essential policy concerns about properly addressing these adverse effects. Future research should explore the underlying mechanisms through which exposure to violence affects children and identify ways to support affected children and their families through public policy interventions. Additionally, it should explore how the effects of conflict mediate the relationship between non-cognitive skills and risky health behaviors.

References

Abadie, A. and Gardeazabal, J. (2003). The Economic Costs of Conflict: A Case Study of the Basque Country. *American Economic Review*, 93(1):113–132.

Akbulut-Yuksel, M. (2014). Children of War: The Long-run Effects of Large-scale Physical Destruction and Warfare on Children. *Journal of Human Resources*, 49(3):634–662.

Akresh, R., Lucchetti, L., and Thirumurthy, H. (2012). Wars and Child Health: Evidence from the Eritrean-Ethiopian Conflict. *Journal of Development Economics*, 99(2):330–340.

Allais, O., Fagherazzi, G., and Mink, J. (2021). The Long-run Effects of War on Health: Evidence from World War II in France. *Social Science and Medicine*, 276.

Almond, D. and Currie, J. (2011). Human Capital Development before Age Five. In Ashenfelter, O. and Card, D., editors, *Handbook of Labor Economics*, volume 4, pages 1315–1486. Elsevier.

Almond, D., Currie, J., and Duque, V. (2018). Childhood Circumstances and Adult Outcomes: Act II. *Journal of Economic Literature*, 56:1360–1446.

Arain, M., Haque, M., Johal, L., Mathur, P., Nel, W., Rais, A., Sandhu, R., and Sharma, S. (2013). Maturation of the Adolescent Brain. *Neuropsychiatric Disease and Treatment*, 9:449–461.

Asselmann, E., Wittchen, H. U., Lieb, R., Höfler, M., and Beesdo-Baum, K. (2016). Does Low Coping Efficacy Mediate the Association between Negative Life Events and Incident Psychopathology? A Prospective-Longitudinal Community Study among Adolescents and Young Adults. *Epidemiology and Psychiatric Sciences*, 25(2):171–180.

Bailey, M. J., Hoynes, H., Rossin-Slater, M., and Walker, R. (2024). Is the Social Safety Net a Long-Term Investment? Large-Scale Evidence From the Food Stamps Program. *Review of Economic Studies*, 91.

Bailey, M. J., Hoynes, H. W., Rossin-Slater, M., and Walker, R. (2020). Is the Social Safety Net a Long-Term Investment? Large-Scale Evidence from the Food Stamps Program. *NBER Working Paper Series 26942*.

Bastian, J. and Michelmore, K. (2018). The Long-term Impact of the Earned Income Tax Credit on Children's Education and Employment Outcomes. *Journal of Labor Economics*, 36(4):1127–1163.

Bharadwaj, P., Eberhard, J. P., and Neilson, C. A. (2018). Health at Birth, Parental Investments, and Academic Outcomes. *Journal of Labor Economics*, 36(2):349–394.

Blattman, C. and Annan, J. (2010). The Consequences of Child Soldiering. *Review of Economics and Statistics*, 92(4):882–898.

Borghans, L., ter Weel, B., and Weinberg, B. A. (2008). Interpersonal Styles and Labor Market Outcomes. *Journal of Human Resources*, 43(4):815–858.

Brodeur, A. and Yousaf, H. (2022). On the Economic Consequences of Mass Shootings. *The Review of Economics and Statistics*, pages 1–43.

Burke, N. J., Hellman, J. L., Scott, B. G., Weems, C. F., and Carrion, V. G. (2011). The Impact of Adverse Childhood Experiences on an Urban Pediatric Population. *Child Abuse and Neglect*, 35(6):408–413.

Camacho, A. (2008). Stress and Birth Weight: Evidence from Terrorist Attacks. *American Economic Review*, 98(2):511–515.

Cawley, J. and Ruhm, C. J. (2011). The Economics of Risky Health Behaviors. In Pauly, M. V., Mcguire, T. G., and Barros, P. P., editors, *Handbook of Health Economics*, volume 2, pages 95–199. Elsevier.

Centro Nacional de Memoria Histórica (2013). *¡Basta ya! Colombia: Memorias de Guerra y Dignidad*. Bogotá:, Imprenta Nacional.

Chassin, L., Presson, C. C., Rose, J. S., and Sherman, S. J. (1996). The Natural History of Cigarette Smoking from Adolescence to Adulthood: Demographic Predictors of Continuity and Change. *Health Psychology*, 15(6):478–484.

Chetty, R., Hendren, N., and Katz, L. F. (2016). The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Ppportunity Experiment. *American Economic Review*, 106(4):855–902.

Conti, G. and Heckman, J. (2012). The Economics of Child Well-Being. *NBER Working Paper No. 18466*.

Cook, P. J. and Moore, M. J. (2001). Environment and Persistence in Youthful Drinking Patterns. In Gruber, J., editor, *Risky Behavior among Youths: An Economic Analysis*, chapter 8, pages 375–438. University of Chicago Press, Chicago, IL.

Cunha, F. and Heckman, J. (2007). The Technology of Skill Formation. *American Economic Review*, 97(2):31–47.

Currie, J. (2001). Early Childhood Education Programs. *Journal of Economic Perspectives*, 15(2):213–238.

de la Espriella Guerrero, R. A., Rodriguez, V., Rincón, C. J., Morales, D. C., Rodríguez, S. J. P., and Gómez-Restrepo, C. (2016). Consumo de Alcohol en la Población Colombiana. Encuesta Nacional de Salud Mental 2015. *Revista Colombiana de Psiquiatria*, 45(S1):76–88.

Deming, D. (2009). Early Childhood Intervention and Life-cycle Skill Development: Evidence from Head Start. *American Economic Journal: Applied Economics*, 1(3):111–134.

Deming, D. J. (2017). The Growing Importance of Social Skills in the Labor Market. *Quarterly Journal of Economics*, 132(4):1593–1640.

Deza, M. (2015). Is There a Stepping Stone Effect in Drug Use? Separating State Dependence from Unobserved Heterogeneity within and between Illicit Drugs. *Journal of Econometrics*, 184(1):193–207.

Di Maio, M. and Sciabolazza, V. L. (2021). Conflict Exposure and Health: Evidence from the Gaza Strip. *Health Economics*, 30(9).

Dube, S. R., Miller, J. W., Brown, D. W., Giles, W. H., Felitti, V. J., Dong, M., and Anda, R. F. (2006). Adverse Childhood Experiences and the Association with ever using Alcohol and Initiating Alcohol Use During Adolescence. *Journal of Adolescent Health*, 38(4):1–10.

Ellsberg, M., Heise, L., Peña, R., Agurto, S., and Winkvist, A. (2001). Researching Domestic Violence against Women: Methological and Ethical Considerations. *Studies in Family Planning*, 32(1):1–16.

Fernández, M., Ibáñez, A. M., and Peña, X. (2014). Adjusting the Labour Supply to Mitigate Violent Shocks: Evidence from Rural Colombia. *Journal of Development Studies*, 50(8):1135–1155.

Figlio, D., Guryan, J., Karbownik, K., and Roth, J. (2014). The Effects of Poor Neonatal Health on Children's Cognitive Development. *American Economic Review*, 104(12):3921–3955.

Friedman, A. S. (2020). Smoking to Cope: Addictive Behavior as a Response to Mental Distress. *Journal of Health Economics*, 72.

Garrett, A., Cohen, J. A., Zack, S., Carrion, V., Jo, B., Blader, J., Rodriguez, A., Vanasse, T. J., Reiss, A. L., and Agras, W. S. (2019). Longitudinal Changes in Brain Function Associated with Symptom Improvement in Youth with PTSD. *Journal of Psychiatric Research*, 114:161–169.

Giedd, J. N. (2004). Structural Magnetic Resonance Imaging of the Adolescent Brain. *Annals of the New York Academy of Sciences*, 1021(1):77–85.

Gould, E. D., Lavy, V., and Paserman, M. D. (2011). Sixty Years after the Magic Carpet Ride: The Long-run Effect of the Early Childhood Environment on Social and Economic Outcomes. *Review of Economic Studies*, 78(3):938–973.

Grossman, D. and Khalil, U. (2022). Neighborhood Crime and Infant Health. *Journal of Urban Economics*, 130.

Grossman, M. and Markowitz, S. (2005). I Did What Last Night? Adolescent Risky Sexual Behaviors and Substance Abuse. *Eastern Economic Journal*, 31(3):383–405.

Gruber, J. and Zinman, J. (2001). Youth Smoking in the United States. In Gruber, J., editor, *Risky Behavior among Youths: An Economic Analysis*, chapter 2, pages 69–120. University of Chicago Press, Chicago, IL.

Heckman, J. (2000). Policies to Foster Human Capital. *Research in Economics*, 54(1):3–56.

Heckman, J., Pinto, R., and Savelyev, P. (2013). Understanding the Mechanisms through which an Influential Early Childhood Program Boosted Adult Outcomes. *American Economic Review*, 103(6):2052–2086.

Heckman, J. and Rubinstein, Y. (2001). The Importance of Noncognitive Skills: Lessons from the GED Testing Trogram. *American Economic Review*, 91(2):145–149.

Heckman, J., Stixrud, J., and Urzua, S. (2006). The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior. *Journal of Labor Economics*, 24(3):411–482.

Hoynes, H., Schanzenbach, D. W., and Almond, D. (2016). Long-Run Impacts of Childhood Access to the Safety Net. *American Economic Review*, 106(4):903–934.

Institute for Economics and Peace (2023). Global Terorrism Index. Retrieved from https://www.economicsandpeace.org/reports/.

Jacobson, M. and Royer, H. (2011). Aftershocks: The Impact of Clinic Violence on Abortion Services. *American Economic Journal: Applied Economics*, 3(1):189–223.

Jürges, H., Stella, L., Hallaq, S., and Schwarz, A. (2022). Cohort at Risk: Long-term Consequences of Conflict for Child School Achievement. *Journal of Population Economics*, 35(1):1–43.

Koppensteiner, M. F. and Menezes, L. (2021). Violence and Human Capital Investments. *Journal of Labor Economics*, 39(3):787–823.

Kreif, N., Mirelman, A., Suhrcke, M., Buitrago, G., and Moreno-Serra, R. (2022). The Impact of Civil Conflict on Child Health: Evidence from Colombia. *Economics and Human Biology*, 44.

Levine, P. B. (2001). The Sexual Activity and Birth-control use of American Teenagers. In Gruber, J., editor, *Risky Behavior among Youths: An Economic Analysis*, chapter 4, pages 167–218. University of Chicago Press, Chicago, IL.

León, G. (2012). Civil Conflict and Human Capital Accumulation: The Long-term Effects of Political Violence in Perú. *Journal of Human Resources*, 47(4):991–1022.

Lindqvist, E. and Vestman, R. (2011). The Labor Market Returns to Cognitive and Noncognitive Ability: Evidence from the Swedish Enlistment. *American Economic Journal: Applied Economics*, 3(1):101–128.

Ludwig, J. and Miller, D. L. (2007). Does Head Start Improve Children's Life Chances? Evidence from a Regression Discontinuity Design. *Quarterly Journal of Economics*, 122(1):159–208.

Manian, S. (2021). Conflict and Risky Health Behavior: Evidence from Mexico's Drug War. *Journal of Development Economics*, 148.

Marshall, M. G. (2020). Major Episodes of Political Violence 1946-2019. Retrieved from https://www.systemicpeace.org/warlist/warlist.htm.

Mezza, A. and Buchinsky, M. (2021). Illegal Drugs, Education, and Labor Market Outcomes. *Journal of Econometrics*, 223(2):454–484.

Minoiu, C. and Shemyakina, O. N. (2014). Armed Conflict, Household Victimization, and Child Health in Côte d'Ivoire. *Journal of Development Economics*, 108:237–255.

National Scientific Council on the Developing Child (2010). Persistent Fear and Anxiety Can Affect Young Children's Learning and Development: Working Paper No. 9. Retrieved from www.developingchild.harvard.edu.

National Scientific Council on the Developing Child (2011). Building the Brain's Air Traffic Control System: How Early Experiences Shape the Development of Executive Function: Working Paper No. 11. Retrieved from www.developingchild.harvard.edu.

National Scientific Council on the Developing Child (2015). Excesssive Stress Disrupts the Architecture of the Developing Brain: Working Paper 3. Retrieved from www.developingchild.harvard.edu.

Raleigh, C., Linke, A., Hegre, H., and Karlsen, J. (2010). Introducing ACLED: An Armed Conflict Location and Event Dataset. *Journal of Peace Research*, 47(5):651–660.

Ramirez Muñoz, J. (2015). Exposición Prenatal a la Violencia: Efectos a Largo Plazo sobre el Desempeño Escolar. *Documento CEDE 11*.

Rees, D. I., Argys, L. M., and Averett, S. L. (2001). New Evidence on the Relationship between Substance Use and Adolescent Sexual Behavior. *Journal of Health Economics*, 20(5):835–845.

Renna, F. (2008). Teens' Alcohol Consumption and Schooling. *Economics of Education Review*, 27(1):69–78.

Rodriguez, C. and Sanchez, F. (2009). Armed Conflict Exposure, Human Capital Investments and Child Labor: Evidence from Colombia. *Documento CEDE 5*.

Rodriguez, C. and Sanchez, F. (2010). Books and Guns: The Quality of Schools in Conflict Zones. *Documento CEDE 38*.

Shany, A. (2023). Too Scared for School? Effects of Terrorism on Students' Achievement. *Journal of Human Resources*.

Shemyakina, O. N. (2021). Political Violence and Child Health: Results from Zimbabwe. *Economics and Human Biology*, 42.

Shonkoff, J. P., Garner, A. S., Siegel, B. S., Dobbins, M. I., Earls, M. F., McGuinn, L., Pascoe, J., Wood, D. L., High, P. C., Donoghue, E., Fussell, J. J., Gleason, M. M., Jaudes, P. K., Jones, V. F., Rubin, D. M., Schulte, E. E., Macias, M. M., Bridgemohan, C., Fussell, J., Goldson, E., McGuinn, L. J., Weitzman, C., and Wegner, L. M. (2012). The Lifelong Effects of Early Childhood Adversity and Toxic Stress. *Pediatrics*, 129(1):232–246.

Sánchez-Ariza, J., Cuartas, J., and Moya, A. (2023). The Mental Health of Caregivers and Young Children in Conflict-Affected Settings. *AEA Papers and Proceedings*, 113.

Winters, K. C. and Arria, A. (2011). Adolescent Brain Development and Drugs. *The Prevention Researcher*, 18(2):21–24.

7 Figures and Tables

7.1 Figures

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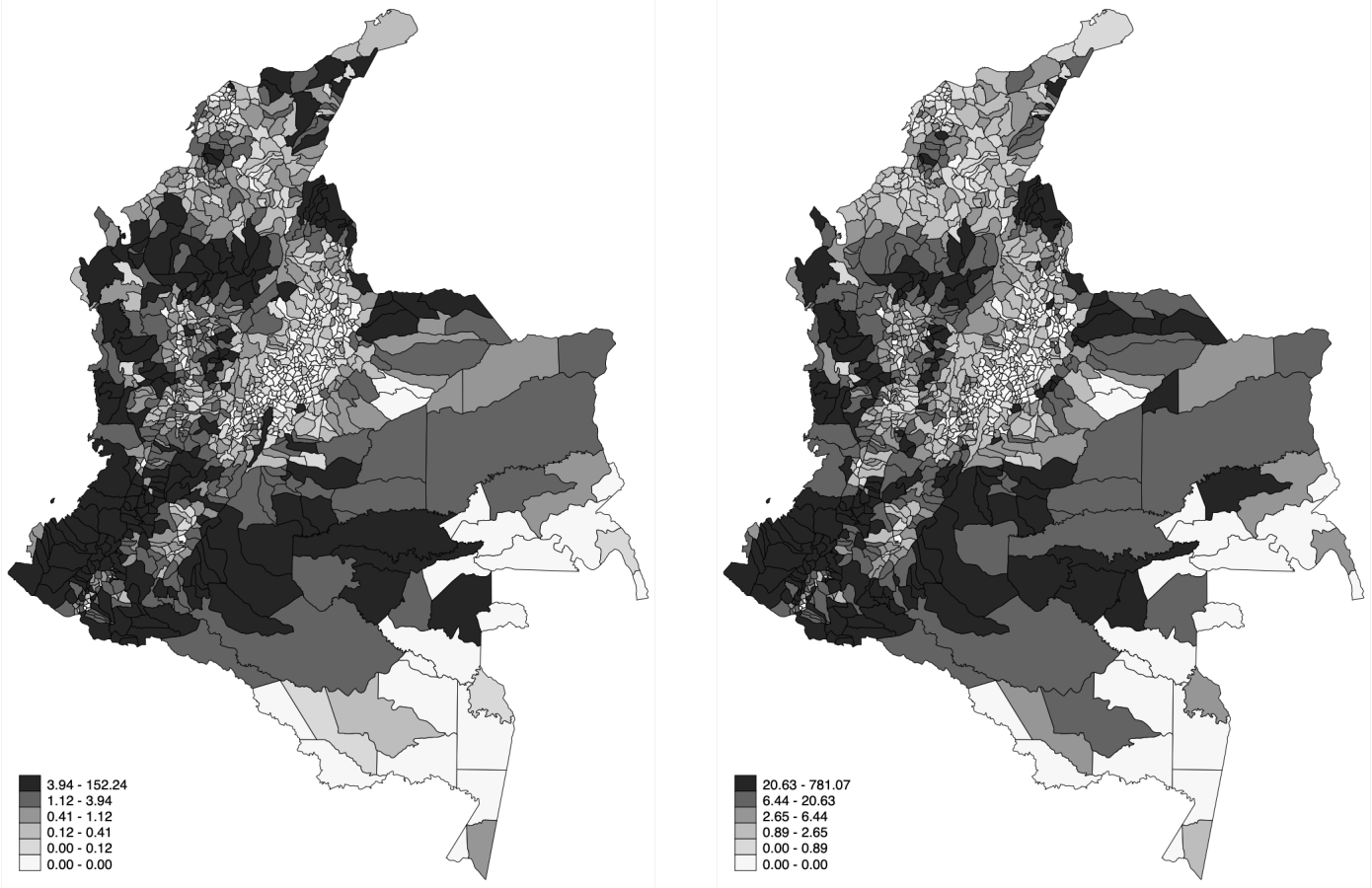
Figure 1: Terrorist attacks between 2000-2016

(a) Number of Terrorist Attacks

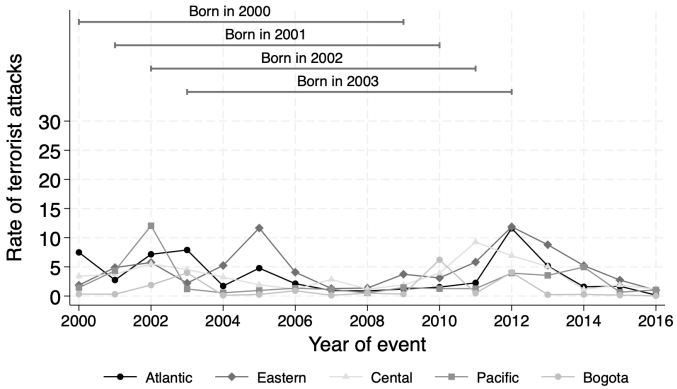
(b) Rate of Terrorist Attacks



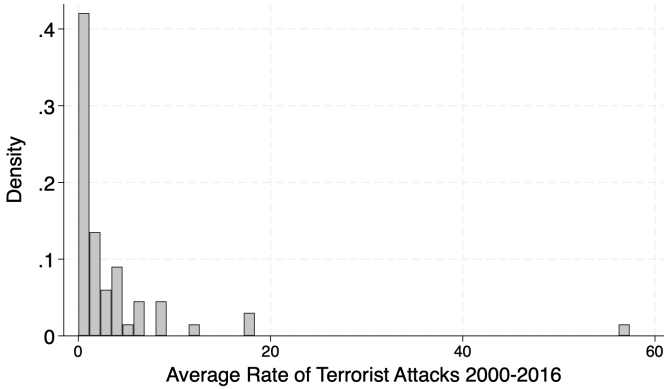
Notes: The figure above shows the geographic variation in terrorist attacks between 2000-2016. Panel (a) estimates the average number of terrorist attacks in the municipality between 2000-2016, while Panel (b) estimates the average rate of terrorist attacks per 100,000 inhabitants in the municipality between 2000-2016. Each panel shows the mean for each of the municipalities in Colombia between 2000-2016, excluding the insular department.

Figure 2: Average Rate of terrorist attacks between 0-9 years old, split by region

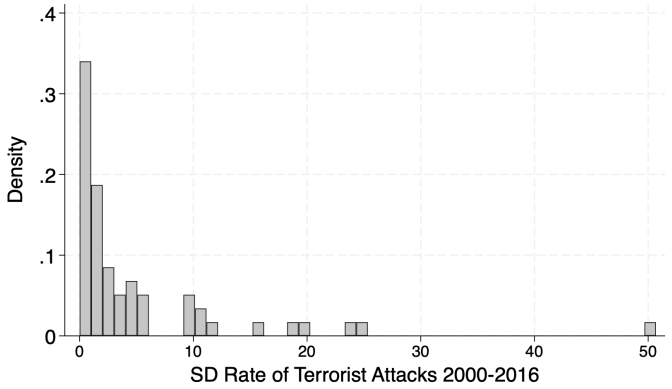
(a) Average rate of terrorist attacks by region and year



(b) Distribution of the Average rate of terrorist attacks by municipality



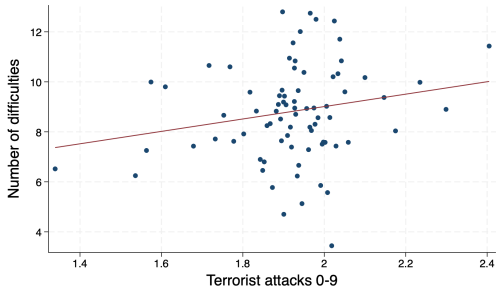
(c) Distribution of the Within-Municipality standard deviation of the rate of terrorist attacks



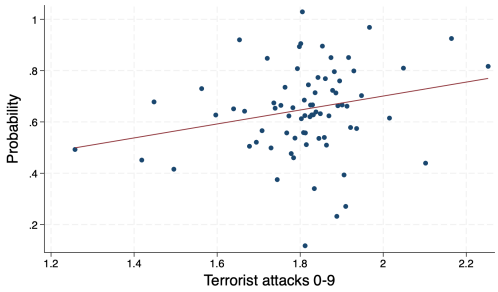
Notes: The figure above shows the variation in the rate of terrorist attacks between 2000-2016 for the municipalities in the sample. Due to data restrictions, the municipalities in the sample are considered restricted access data. Panel (a) estimates the average per region and year. It also shows the years used to create the rate of terrorist attacks between 0-9 years old for each cohort. Panel (b) plots the distribution of the average rate of terrorist attacks between 2000-2016 for each municipality, while panel (c) shows the distribution of within-municipality standard deviation in the rate of terrorist attacks between 2000-2016. The regions follow the same division as the Colombian Longitudinal Survey (ELCA).

Figure 3: Correlation between Terrorist Attacks and Socioemotional Skills and Alcohol Consumption

(a) Socioemotional Skills Difficulties

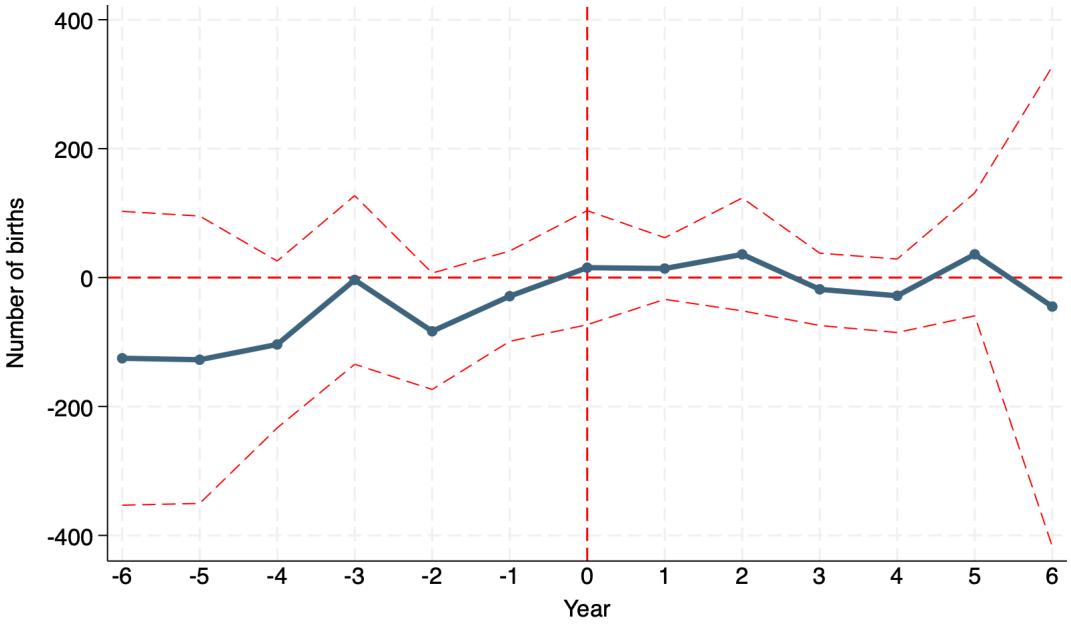


(b) Ever Tried Alcohol



Notes: The figure above shows the relationship between the rate of terrorist attacks a child was exposed to between 0 and 9 years old and the two main outcomes. The figure shows residualized means, conditional on municipality and cohort fixed effects. Socioemotional skills difficulties are measured as the total number of difficulties from the Strengths and Difficulties Questionnaire (SDQ) test score, and a higher score reflects that the child has more problems. Ever tried alcohol is a binary indicator that measures whether the children had tried alcohol before the time of the survey (2016). .

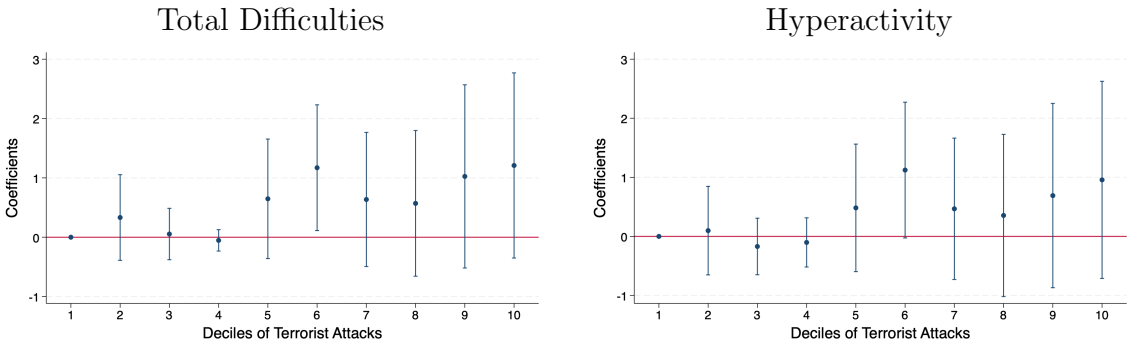
Figure 4: Impact of Terrorist Attacks on Number of Births



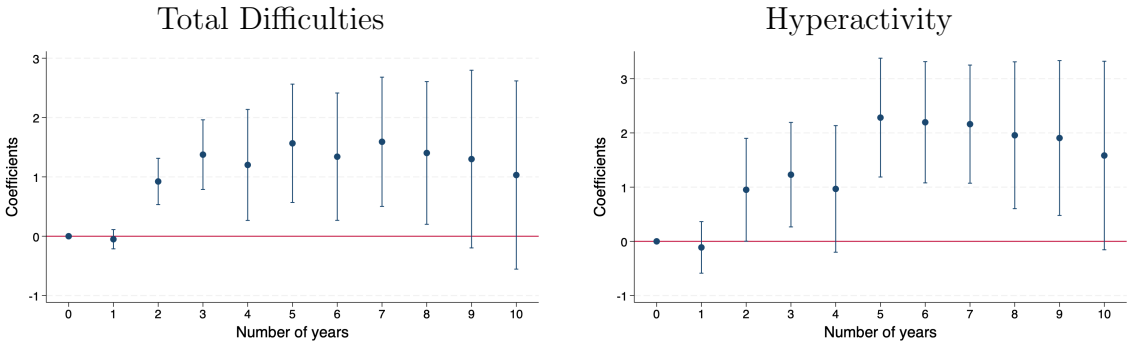
Notes: The figure above reports estimates from regressions of the rate of terrorist attacks per 100,000 inhabitants 7 years prior and 7 years after on the number of births in a given cohort. The solid line represents the point estimate, and the dashed lines represent 95% confidence intervals. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

Figure 5: Non-Linear Impacts of Terrorist Attacks on Socioemotional Skills

Panel A. Deciles of Rate of Terrorist Attacks



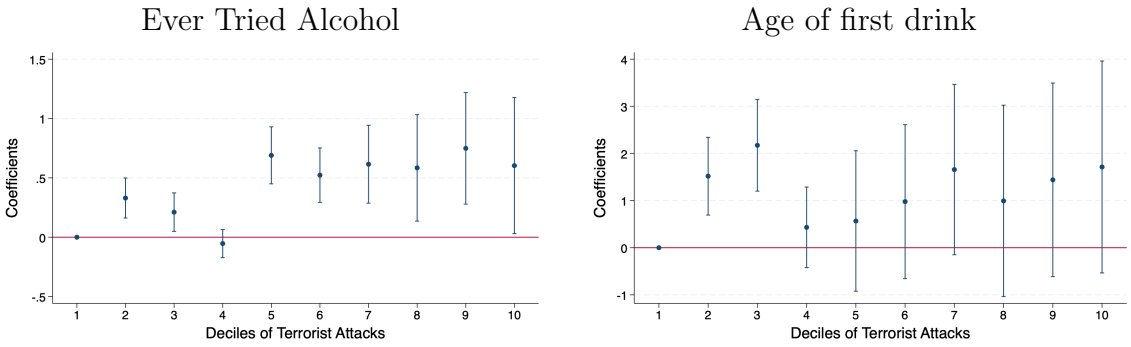
Panel B. Number of years exposed to terrorist attacks



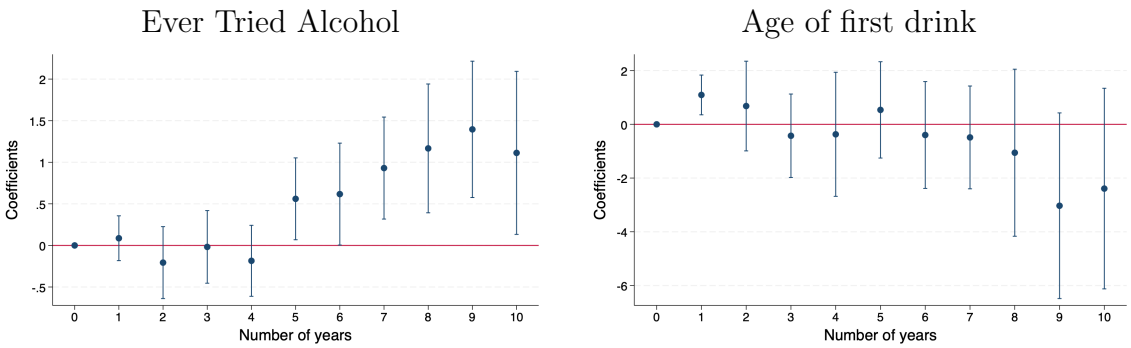
Notes: Panel A in the figure above reports estimates from regressions of the deciles of the rate of terrorist attacks a child was exposed to between 0 and 9 years old on Socioemotional Skills Scores. The first decile is the omitted category. Panel B in the figure above reports estimates from regressions of the number of years with strictly greater than 0 terrorist attacks exposure between 0 and 9 years old on Socioemotional Skills Scores. 0 years of exposure is the omitted category. All models include controls for children's biological sex, education, order within the children of the household, age of caretaker, education of the caretaker, whether the household is a two-parent in 2010, annual logarithm of consumption in 2010, and household size in 2010. Results are weighted by children's ELCA weights. Vertical bars represent 95% confidence intervals. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

Figure 6: Non-Linear Impacts of Terrorist Attacks on Alcohol Consumption

Panel A. Deciles of Rate of Terrorist Attacks

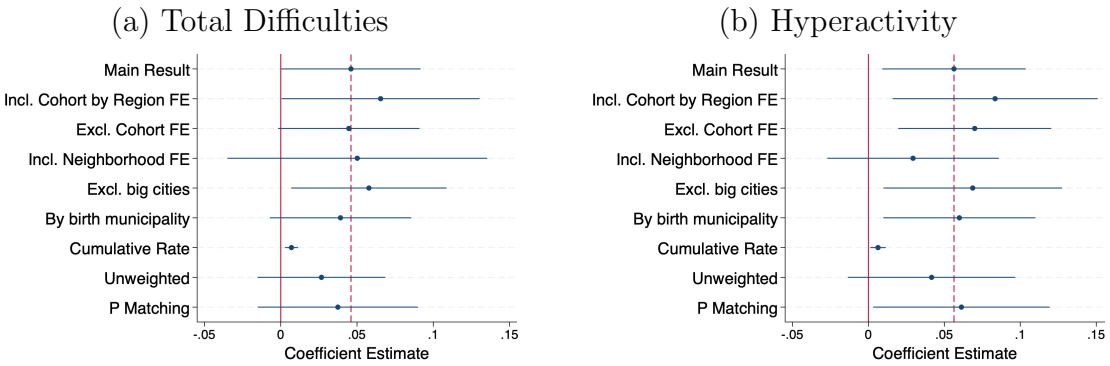


Panel B. Number of years exposed to terrorist attacks



Notes: Panel A in the figure above reports estimates from regressions of the deciles of the rate of terrorist attacks a child was exposed to between 0 and 9 years old on Alcohol Consumption Outcomes. The first decile is the omitted category. Panel B in the figure above reports estimates from regressions of the number of years with strictly greater than 0 terrorist attacks exposure between 0 and 9 years old on Alcohol Consumption Outcomes. 0 years of exposure is the omitted category. All models include controls for children's biological sex, education, order within the children of the household, age of caretaker, education of the caretaker, whether the household is a two-parent in 2010, annual logarithm of consumption in 2010, and household size in 2010. Results are weighted by children's ELCA weights. Vertical bars represent 95% confidence intervals. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

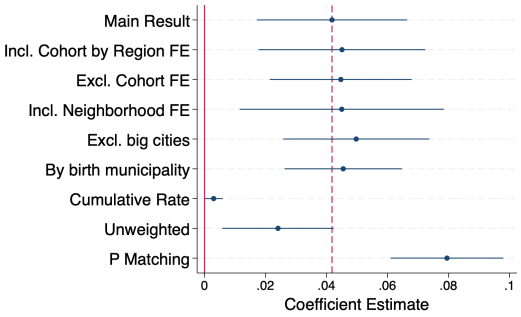
Figure 7: Robustness Checks on Socioemotional Skills



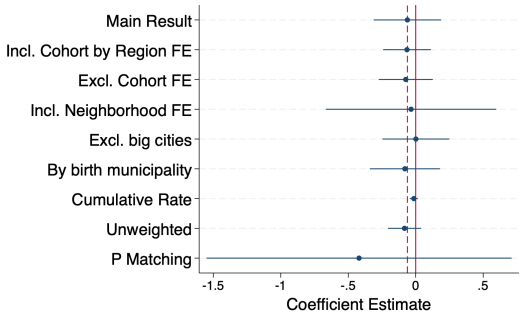
Notes: The figure above reports estimates from regressions of the rate of terrorist attacks a child was exposed to between 0 and 9 years old on Socioemotional Skills Scores for different specifications. Results are weighted by children's ELCA weights. Horizontal bars represent 95% confidence intervals. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level. The "Main Result" estimate (at the top) uses the specification from the even columns of Table 4. All other estimates are variations on the baseline model. Estimates 2-4 vary the set of fixed effects. Estimate 5 restricts the sample to small municipalities only, and estimate 6 assigns the rate of terrorist attacks to the birth municipality instead of the residency municipality. Estimate 7 uses the cumulative rate of terrorist attacks between 0 and 9, instead of the average rate, while estimate 8 indicates no weights are used in the regression. Finally, estimate 9 uses a probability matching estimation.

Figure 8: Robustness Checks on Alcohol Consumption

(a) Ever Tried Alcohol



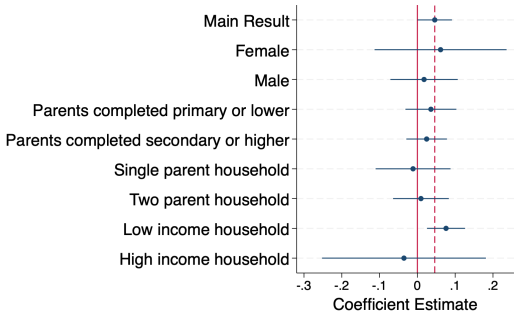
(b) Age of first drink



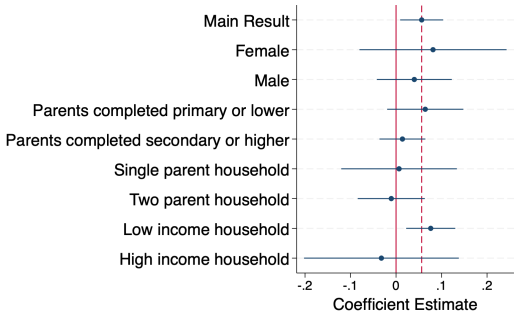
Notes: The figure above reports estimates from regressions of the rate of terrorist attacks a child was exposed to between 0 and 9 years old on Alcohol Consumption Outcomes for different specifications. Results are weighted by children's ELCA weights. Horizontal bars represent 95% confidence intervals. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level. The "Main Result" estimate (at the top) uses the specification from the even columns of Table 5. All other estimates are variations on the baseline model. Estimates 2-4 vary the set of fixed effects and use of the instrumental variables strategy. Estimate 5 restricts the sample to small municipalities only, and estimate 6 assigns the rate of terrorist attacks to the birth municipality instead of the residency municipality. Estimate 7 uses the cumulative rate of terrorist attacks between 0 and 9, instead of the average rate, while estimate 8 indicates no weights are used in the regression. Finally, estimate 9 uses a probability matching estimation.

Figure 9: Heterogeneous Impacts on Socioemotional Skills

(a) Total Difficulties



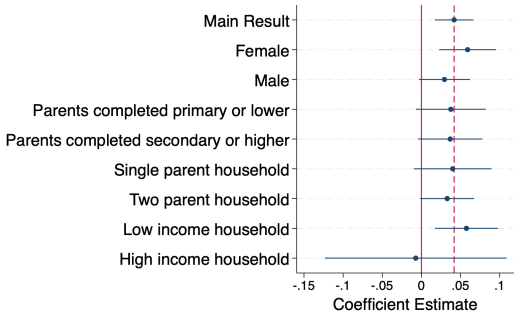
(b) Hyperactivity



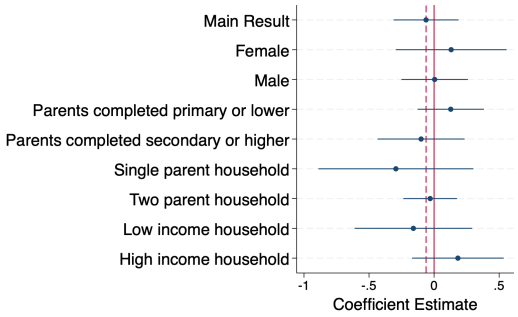
Notes: The figure above reports estimates from regressions of the rate of terrorist attacks a child was exposed to between 0 and 9 years old on Socioemotional Skills Scores separated based on characteristics of the children, their parents, and their household. Results are weighted by children's ELCA weights. Horizontal bars represent 95% confidence intervals. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

Figure 10: Heterogeneous Impacts on Alcohol Consumption

(a) Ever Tried Alcohol



(b) Age of first drink



Notes: The figure above reports estimates from regressions of the rate of terrorist attacks a child was exposed to between 0 and 9 years old on Alcohol Consumption Outcomes separated based on characteristics of the children, their parents, and their household. Results are weighted by children's ELCA weights. Horizontal bars represent 95% confidence intervals. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

7.2 Tables

Table 1: Summary Statistics

	Mean	SD	Median	Min	Max
A. Adolescents characteristics					
Sex (1 = Male)	0.50	0.50	0.00	0.00	1.00
Age in years	14.04	0.88	14.00	13.00	16.00
Years of education	7.02	1.59	7.00	0.00	10.00
B. Household characteristics					
Two parent household	0.57	0.49	1.00	0.00	1.00
Household size	5.43	2.49	5.00	2.00	28.00
Total anual expenditure (in millions)	15.61	23.96	10.89	0.00	534.69
C. Caretaker characteristics					
Age	41.63	8.38	40.00	28.00	80.00
Years of education	9.06	4.39	11.00	0.00	21.00
Participation in social organizations (Number)	0.21	0.52	0.00	0.00	5.00
Leader in a social organizations (Number)	0.08	0.34	0.00	0.00	4.00
D. Municipality characteristics					
Rurality index	0.21	0.20	0.14	0.00	0.64
Distance to department capital	42.27	49.61	26.55	0.00	228.06
Unsatisfied Basic Needs (Urban in 2005)	21.63	15.81	17.24	7.06	96.19
Population in 2010 (in thousands)	406.44	1,033.10	111.20	3.39	7,363.78
Rate of terrorist attacks 0-9	3.68	8.39	0.98	0.00	52.67
Homicide rate 0-9	105.65	134.08	62.89	0.00	775.82

Notes: The table above reports summary statistics of the municipalities and adolescents in the sample. It includes adolescents's characteristics and those of their households and caretakers. The table only includes the municipalities in the sample of analysis, not all of the country. Adolescent variables are from the 2016 survey, while household and caretaker characteristics are from the baseline (2010).

Table 2: Variation in Rate of Terrorist Attacks After Removing Cohort and Municipality Fixed Effects

	Mean	SD	Median	Min	Max
A. Raw variables					
Rate of terrorist attacks 0-9	3.42	8.73	1.35	0.00	72.00
B. Residuals after removing cohort and municipality FE					
Residuals of Rate of terrorist attacks 0-9	0.02	1.33	0.02	-11.89	7.13

Notes: The table above reports the raw variation in the average rate of terrorist attacks a child was exposed to between 0 and 9 years old and the variation that is left after removing cohort and municipality fixed effects. The table only includes the municipalities in the sample of analysis. Results are weighted by children's ELCA weights. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

Table 3: Balancing Tests for Municipality Shocks and Characteristics

	Rate of Terrorist Attacks
A. Municipality-Level Characteristics	
Rurality index	-0.000
	(0.000)
Gross Domestic Product (in billions)	-0.066
	(0.704)
Income (in billions)	0.134
	(2.647)
Tax Income (in billions)	0.191
	(1.202)
Expenditure (in billions)	0.061
	(2.600)
Deficit (in billions)	0.073
	(0.100)
Central Government Transfers (in billions)	0.037
	(0.544)
Central Government Transfers for Education (in billions)	0.050
	(0.401)
entral Government Transfers for Health (in billions)	-0.016
	(0.087)
Number of Primary school age children	8.243
	(14.235)
Number of Secondary school age children	13.359
	(24.960)
Number of schools	0.123
	(0.166)
Number of teachers	1.425
	(2.872)
Number of students	37.572
	(40.381)
B. Cohort Characteristics	
Number of births	0.819
	(6.241)
Number of low birth weights	0.269
	(0.569)
Number of deaths of children under the age of four	-0.005
	(0.064)

Notes: The table above reports balancing tests for municipality and cohort characteristics. The figures in each row are coefficients from regressions that include, in addition to the rate of terrorist attacks, controls for municipality and cohort fixed effects. All variables are measured using information from the Municipal Panel of the CEDE. *** indicates significance at the 1 percent level, ** at the 5 percent level, and * at the 10 percent level. Figures in parentheses are standard errors corrected for heteroskedasticity and clustered at the municipality level.

Table 4: Effects of Terrorist Attacks on Socioemotional Skills

	Total Score		Score components							
			Hyperactivity		Emotional		Peers problems		Conduct	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
A. Within-Municipality Cross-Cohort Variation										
Terrorist Attacks 0-9 years old	0.046*	0.046**	0.046**	0.056**	0.042**	0.028	0.040	0.043	-0.023	-0.023
	(0.024)	(0.023)	(0.023)	(0.024)	(0.021)	(0.018)	(0.044)	(0.045)	(0.031)	(0.030)
Terrorist Attacks after 10 years old	-0.011	-0.008	-0.043	-0.013	0.040	0.012	0.023	0.026	-0.048	-0.053
	(0.035)	(0.036)	(0.032)	(0.038)	(0.038)	(0.037)	(0.044)	(0.048)	(0.043)	(0.041)
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
B. Nearest Neighbor Match										
Terrorist Attacks 0-9 years old > Median		0.140***		0.063***		0.182***		0.018***		0.114***
		(0.001)		(0.001)		(0.001)		(0.001)		(0.001)
Municipality FE	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Mean of Dependent Variable	8.811	8.811	3.355	3.355	1.939	1.939	1.300	1.300	2.227	2.227
Observations	856	856	856	856	856	856	856	856	856	856
Controls	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Panel A in the table above reports estimates from regressions of the rate of terrorist attacks a child was exposed to between 0 and 9 years old on Socioemotional Skills Scores. Panel B reports estimates from the nearest matching neighbor estimations. All models include controls for children's biological sex, education, order within the children of the household, age of caretaker, education of the caretaker, whether the household is a two-parent in 2010, annual logarithm of consumption in 2010, and household size in 2010. *** indicates significance at the 1 percent level, ** at the 5 percent level, and * at the 10 percent level. Results are weighted by children's ELCA weights. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

Table 5: Effects of Terrorist Attacks on Alcohol Consumption

	Ever tried alcohol		Age of first drink	
	(1)	(2)	(3)	(4)
A. Within-Municipality Cross-Cohort Variation				
Terrorist Attacks 0-9 years old	0.040***	0.042***	-0.070	-0.062
	(0.012)	(0.012)	(0.146)	(0.125)
Terrorist Attacks after 10 years old	0.017	0.023	0.163	0.159
	(0.017)	(0.016)	(0.137)	(0.133)
Municipality FE	Yes	Yes	Yes	Yes
B. Nearest Neighbor Match				
Terrorist Attacks 2000-2016 > Median		0.006***		-0.244***
		(0.001)		(0.002)
Municipality FE	Yes	No	Yes	No
Mean of Dependent Variable	0.643	0.643	12.84	12.84
Observations	870	870	495	495
Controls	No	Yes	No	Yes
Cohort FE	Yes	Yes	Yes	Yes

Notes: Panel A in the table above reports estimates from regressions of the rate of terrorist attacks a child was exposed to between 0 and 9 years old on Alcohol Consumption. Panel B reports estimates from the nearest matching neighbor estimations. All models include controls for children's biological sex, education, order within the children of the household, age of caretaker, education of the caretaker, whether the household is a two-parent in 2010, annual logarithm of consumption in 2010, and household size in 2010. *** indicates significance at the 1 percent level, ** at the 5 percent level, and * at the 10 percent level. Results are weighted by children's ELCA weights. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

Table 6: Effects of Terrorist Attacks on Socioemotional Skills by Childhood periods

	Total Score		Hyperactivity	
	(1)	(2)	(3)	(4)
Terrorist Attacks 0-5 years old	0.064***	0.058***	0.036	0.044**
	(0.019)	(0.018)	(0.025)	(0.021)
Terrorist Attacks 6-9 years old	-0.054**	-0.043*	0.001	0.002
	(0.022)	(0.023)	(0.035)	(0.031)
Terrorist Attacks after 10 years old	-0.138***	-0.115**	-0.072	-0.048
	(0.047)	(0.052)	(0.062)	(0.060)
Mean of Dependent Variable	8.811	8.811	3.355	3.355
Observations	856	856	856	856
Controls	No	Yes	No	Yes
Cohort FE	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes

Notes: The table above reports estimates from regressions of the rate of terrorist attacks a child was exposed to between 0 and 5 years old, and between 6 and 9 years old, separately, on Socioemotional Skills Scores. All models include controls for children's biological sex, education, order within the children of the household, age of caretaker, education of the caretaker, whether the household is a two-parent in 2010, annual logarithm of consumption in 2010, and household size in 2010. *** indicates significance at the 1 percent level, ** at the 5 percent level, and * at the 10 percent level. Results are weighted by children's ELCA weights. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

Table 7: Effects of Terrorist Attacks on Alcohol Consumption by Childhood periods

	Ever tried alcohol		Age of first drink	
	(1)	(2)	(3)	(4)
Terrorist Attacks 0-5 years old	0.013	0.014	-0.040	-0.037
	(0.009)	(0.009)	(0.104)	(0.087)
Terrorist Attacks 6-9 years old	0.037***	0.040***	-0.031	-0.025
	(0.013)	(0.014)	(0.087)	(0.085)
Terrorist Attacks after 10 years old	0.054*	0.063**	0.159	0.159
	(0.029)	(0.030)	(0.195)	(0.198)
Mean of Dependent Variable	0.643	0.643	12.84	12.84
Observations	870	870	495	495
Controls	No	Yes	No	Yes
Cohort FE	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes

Notes: The table above reports estimates from regressions of the rate of terrorist attacks a child was exposed to between 0 and 5 years old, and between 6 and 9 years old, separately, on Alcohol Consumption Outcomes. All models include controls for children's biological sex, education, order within the children of the household, age of caretaker, education of the caretaker, whether the household is a two-parent in 2010, annual logarithm of consumption in 2010, and household size in 2010. *** indicates significance at the 1 percent level, ** at the 5 percent level, and * at the 10 percent level. Results are weighted by children's ELCA weights. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

Table 8: Placebo Effects of Terrorist Attacks on Socioemotional Skills

	Total Score	Hyperactivity
	(1)	(2)
Terrorist Attacks 2-7 years before	-0.030	-0.020
	(0.019)	(0.024)
Mean of Dependent Variable	8.811	3.355
Observations	856	856
Controls	Yes	Yes
Cohort FE	Yes	Yes
Municipality FE	Yes	Yes

Notes: The table above reports estimates from regressions of the rate of terrorist attacks between 2 and 7 years the child was born on Socioemotional Skills Scores. All models include controls for children's biological sex, education, order within the children of the household, age of caretaker, education of the caretaker, whether the household is a two-parent in 2010, annual logarithm of consumption in 2010, and household size in 2010. *** indicates significance at the 1 percent level, ** at the 5 percent level, and * at the 10 percent level. Results are weighted by children's ELCA weights. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

Table 9: Placebo Effects of Terrorist Attacks on Alcohol Consumption

	Ever tried alcohol	Age of first drink
	(1)	(2)
Terrorist Attacks 2-7 years before	-0.015	-0.069
	(0.012)	(0.064)
Mean of Dependent Variable	0.643	12.84
Observations	870	495
Controls	Yes	Yes
Cohort FE	Yes	Yes
Municipality FE	Yes	Yes

Notes: The table above reports estimates from regressions of the rate of terrorist attacks between 2 and 7 years the child was born on Alcohol Consumption Outcomes. All models include controls for children's biological sex, education, order within the children of the household, age of caretaker, education of the caretaker, whether the household is a two-parent in 2010, annual logarithm of consumption in 2010, and household size in 2010. *** indicates significance at the 1 percent level, ** at the 5 percent level, and * at the 10 percent level. Results are weighted by children's ELCA weights. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

The Impacts of Terrorist Attacks on Teenagers' Socioemotional Skills and Risky Health Behaviors

Nicolás Fuertes-Segura

Online Appendix

A Details on Sample Selection

In this appendix, I cover details of the sample selection process. Recall from section 3.3.1 that the survey started in 2010. The first wave included over 5,000 households (strata 1 to 4). At baseline, the target population consisted of the head of the household, their partner, and any children under nine years old living in the household. Regardless of whether they subsequently left the household, these individuals were followed across the three waves in which the survey was conducted until 2016. Indeed, in 2016, 89% of the original households were interviewed.

The baseline survey also collected basic information from an individual not selected to be in the target population. For subsequent waves, any new household member would also not be considered in the target population and would only answer a small questionnaire. For example, if, in 2013, a kid and the head of the household moved with her grandmother, then the kid and the head of the household would answer the complete questionnaire while the grandmother would only answer the basic one. However, if the kid moved with her grandmother, both would answer the complete questionnaire.

In 2016, the survey included risky health behaviors questions and the Strengths and Difficulties Questionnaire (SDQ), which was only for the children selected as the target population in 2010 and were older than ten at the moment of the survey in 2016. Therefore, the information is only available for adolescents aged 10 to 16.

Based on the evidence for Colombia, children typically start drinking after 12 years old (de la Espriella Guerrero et al., 2016). Therefore, I restrict the sample to children aged 13 to 16. The final sample consists of 870 children born between 2000 and 2003. The sample includes data from 832 households out of the more than 5,000 included in the survey, as only they have children in the specified age range.

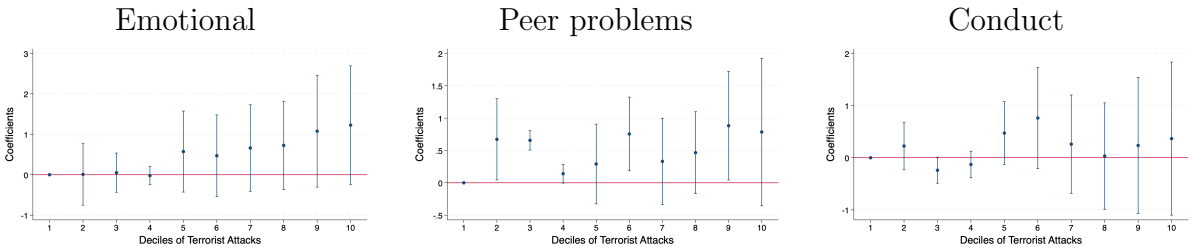
B Extra estimates on Socioemotional Skills Components

As explained in Section 5, there are no significant effects on three of the components of the socioemotional skills score: emotional, peer problems, and conduct. However, this section presents all analyses conducted for the total difficulties and hyperactivity scores. This section includes the following figures and tables:

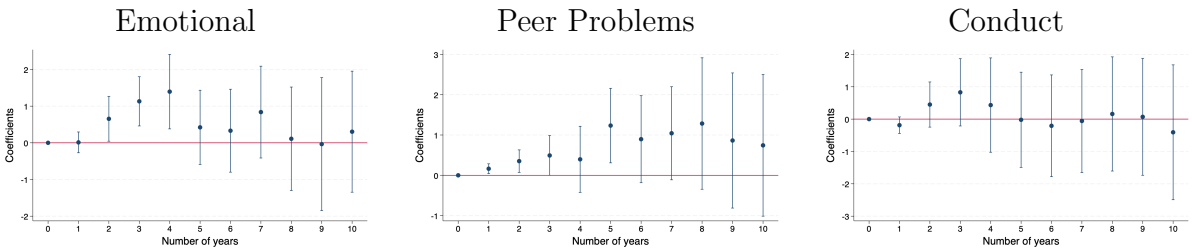
- Non-linear effects of terrorist attacks as presented in section 5.5.2
- Effects of terrorist attacks by childhood periods as presented in section 5.5.3
- Robustness and alternative specification checks as presented in section 5.5.4
- Heterogeneous effects as presented in section 5.5.5
- Placebo effects as presented in section 5.5.6

Figure B.1: Non-Linear Impacts of Terrorist Attacks on Socioemotional Skills Components

Panel A. Deciles of Rate of Terrorist Attacks



Panel B. Number of years exposed to terrorist attacks



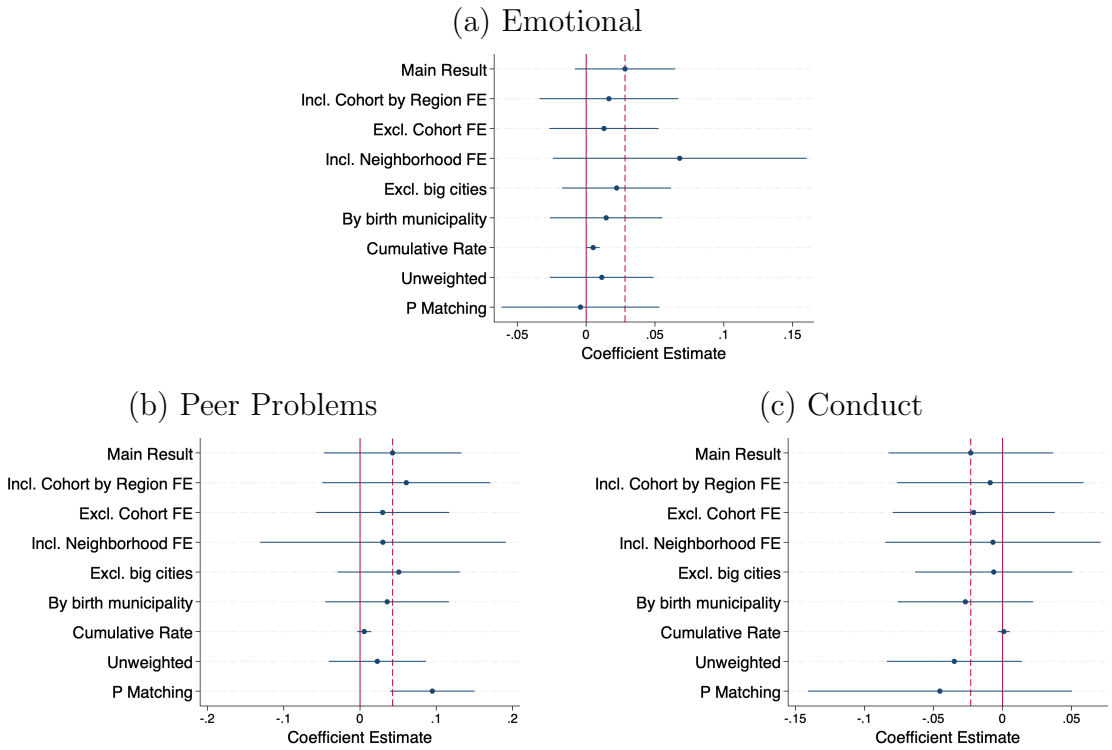
Notes: Panel A in the figure above reports estimates from regressions of the deciles of the rate of terrorist attacks a child was exposed to between 0 and 9 years old on the remaining Socioemotional Skills Components Scores. The first decile is the omitted category. Panel B in the figure above reports estimates from regressions of the number of years with strictly greater than 0 terrorist attacks exposure between 0 and 9 years old on the remaining Socioemotional Skills Components Scores. 0 years of exposure is the omitted category. All models include controls for children's biological sex, education, order within the children of the household, age of caretaker, education of the caretaker, whether the household is a two-parent in 2010, annual logarithm of consumption in 2010, and household size in 2010. Results are weighted by children's ELCA weights. Vertical bars represent 95% confidence intervals. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

Table B.1: Effects of Terrorist Attacks on Socioemotional Skills Components by Childhood periods

	Emotional		Peer problems		Conduct	
	(1)	(2)	(3)	(4)	(5)	(6)
Terrorist Attacks 0-5 years old	0.066***	0.051**	0.039	0.037	0.032	0.021
	(0.017)	(0.022)	(0.029)	(0.030)	(0.023)	(0.021)
Terrorist Attacks 6-9 years old	-0.063***	-0.055**	-0.013	-0.005	-0.099***	-0.078***
	(0.021)	(0.025)	(0.028)	(0.032)	(0.025)	(0.022)
Terrorist Attacks after 10 years old	-0.101*	-0.105*	-0.028	-0.013	-0.206***	-0.174***
	(0.053)	(0.052)	(0.058)	(0.069)	(0.055)	(0.049)
Mean of Dependent Variable	1.939	1.939	1.300	1.300	2.227	2.227
Observations	856	856	856	856	856	856
Controls	No	Yes	No	Yes	No	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table above reports estimates from regressions of the rate of terrorist attacks a child was exposed to between 0 and 5 years old, and between 6 and 9 years old, separately, on the remaining Socioemotional Skills Components Scores. All models include controls for children's biological sex, education, order within the children of the household, age of caretaker, education of the caretaker, whether the household is a two-parent in 2010, annual logarithm of consumption in 2010, and household size in 2010. *** indicates significance at the 1 percent level, ** at the 5 percent level, and * at the 10 percent level. Results are weighted by children's ELCA weights. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

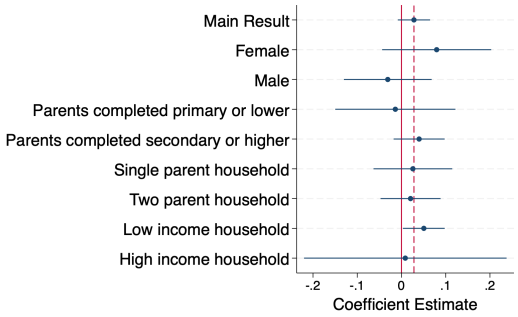
Figure B.2: Robustness checks on Socioemotional Skills Components



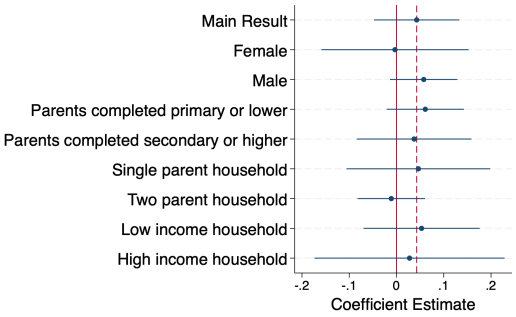
Notes: The figure above reports estimates from regressions of the rate of terrorist attacks a child was exposed to between 0 and 9 years old on remaining Socioemotional Skills Components Scores for different specifications. Results are weighted by children's ELCA weights. Horizontal bars represent 95% confidence intervals. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level. The "Main Result" estimate (at the top) uses the specification from the even columns of Table 4. All other estimates are variations on the baseline model. Estimates 2-4 vary the set of fixed effects. Estimate 5 restricts the sample to small municipalities only, and estimate 6 assigns the rate of terrorist attacks to the birth municipality instead of the residency municipality. Estimate 7 uses the cumulative rate of terrorist attacks between 0 and 9, instead of the average rate, while estimate 8 indicates no weights are used in the regression. Finally, estimate 9 uses a probability matching estimation.

Figure B.3: Heterogeneous Impacts on Socioemotional Skills Components

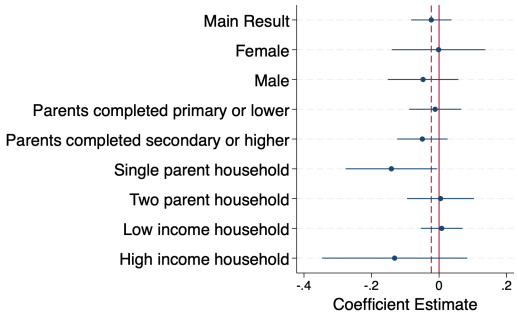
(a) Emotional



(b) Peer Problems



(c) Conduct



Notes: The figure above reports estimates from regressions of the rate of terrorist attacks a child was exposed to between 0 and 9 years old on the remaining Socioemotional Skills Components Scores separated based on characteristics of the children, their parents, and their household. Results are weighted by children's ELCA weights. Horizontal bars represent 95% confidence intervals. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

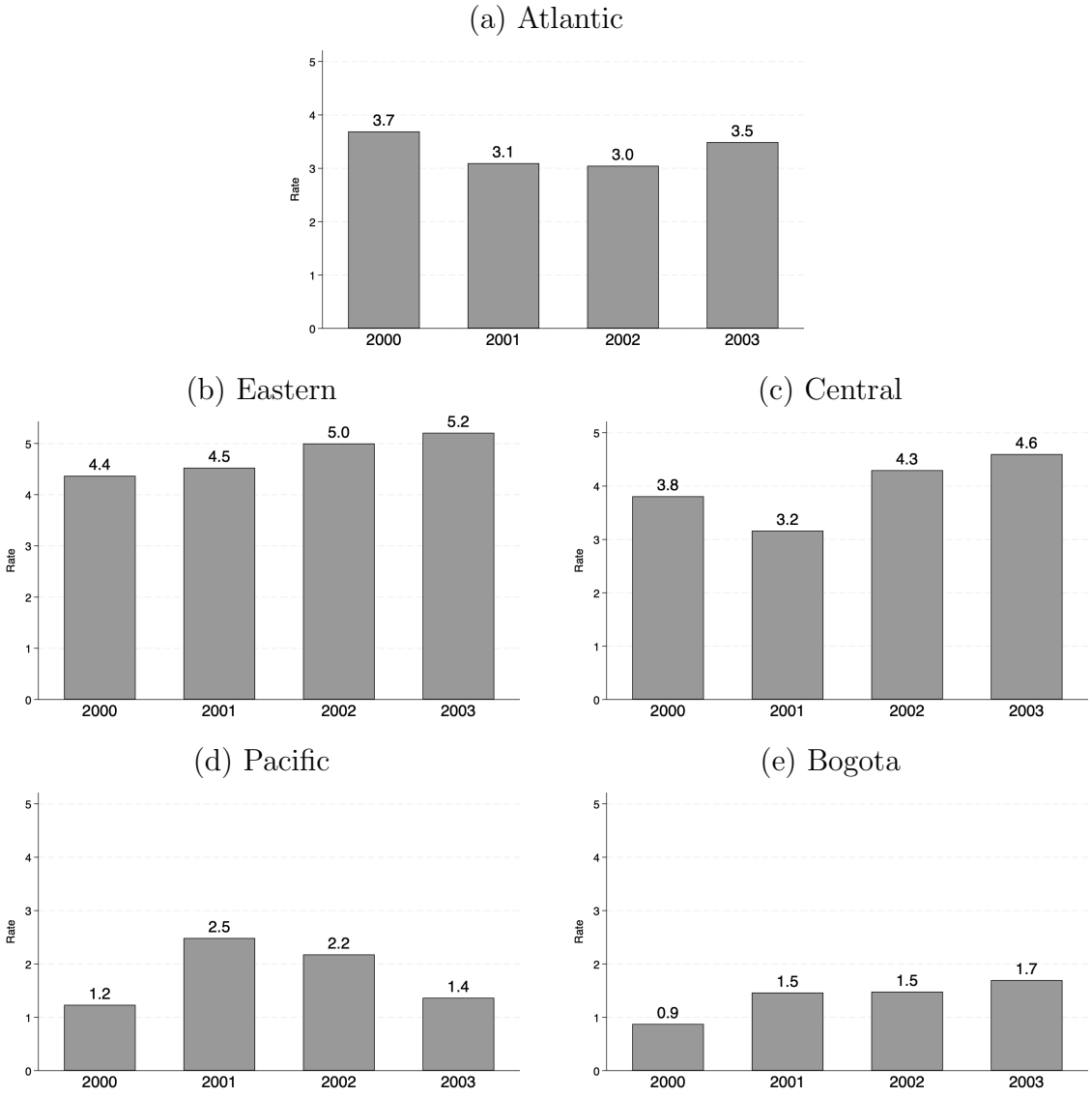
Table B.2: Placebo Effects of Terrorist Attacks on Socioemotional Skills

	Emotional	Peers Problems	Conduct
	(1)	(2)	(3)
Terrorist Attacks 2-7 years before	-0.050*	-0.005	0.010
	(0.025)	(0.025)	(0.014)
Mean of Dependent Variable	1.939	1.300	2.227
Observations	856	856	856
Controls	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes

Notes: The table above reports estimates from regressions of the rate of terrorist attacks between 2 and 7 years the child was born on Socioemotional Skills Scores. All models include controls for children's biological sex, education, order within the children of the household, age of caretaker, education of the caretaker, whether the household is a two-parent in 2010, annual logarithm of consumption in 2010, and household size in 2010. *** indicates significance at the 1 percent level, ** at the 5 percent level, and * at the 10 percent level. Results are weighted by children's ELCA weights. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

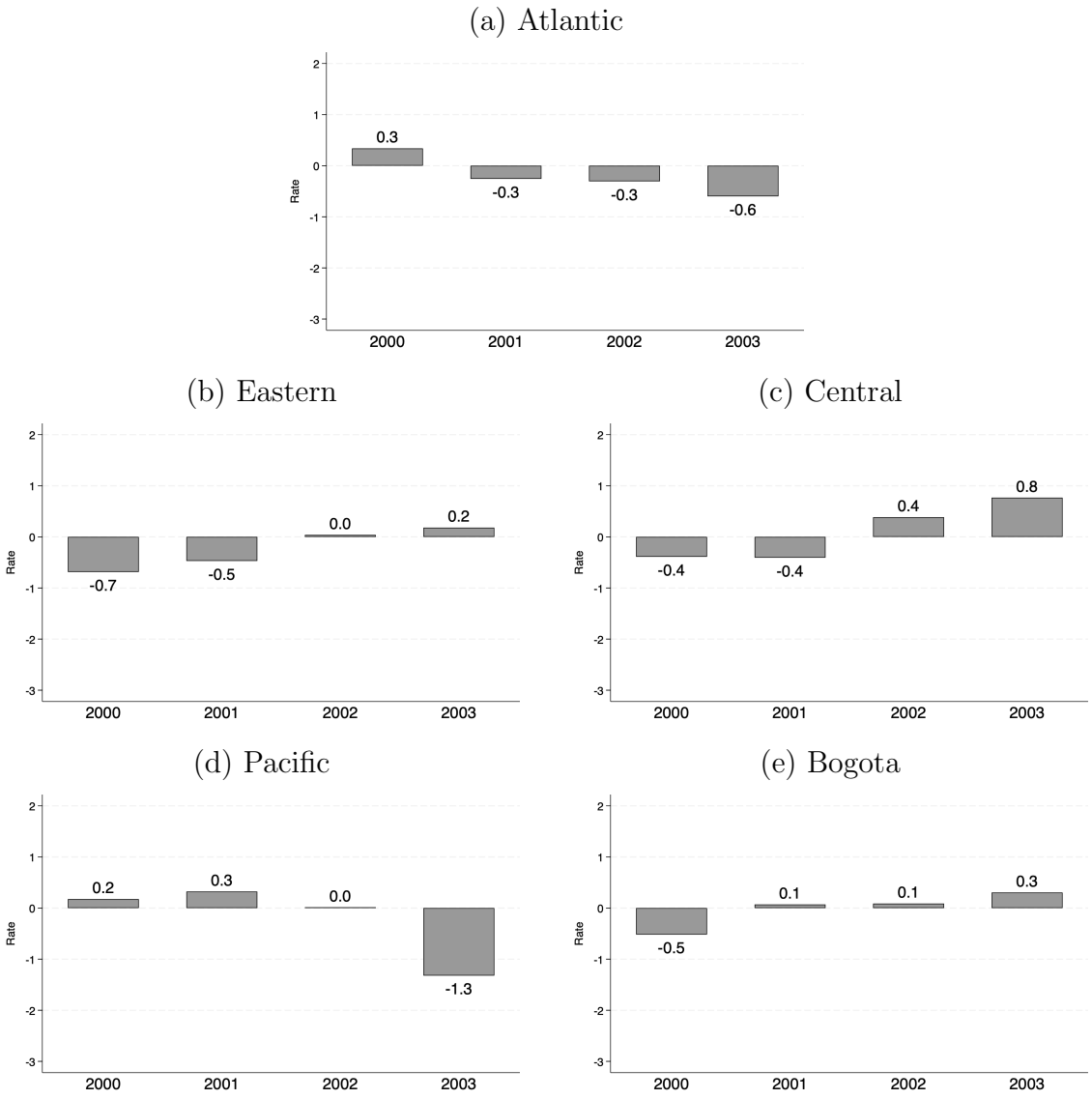
C Supplemental Figures and Tables

Figure C.1: Average Rate of terrorist attacks between 0-9 years old, split by region



Notes: The figure above shows the average rate of terrorist attacks that a child was exposed to between 0 and 9 years per cohort without accounting for the differences in levels across municipalities. The regions follow the same division as the Colombian Longitudinal Survey.

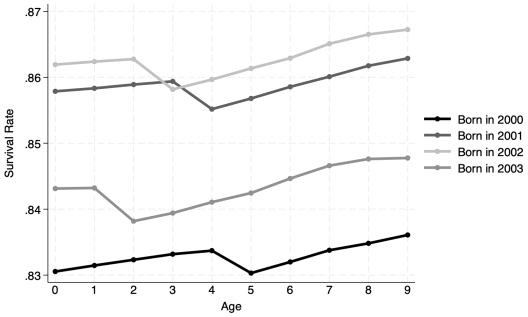
Figure C.2: Average Rate of terrorist attacks between 0-9 years old, split by region



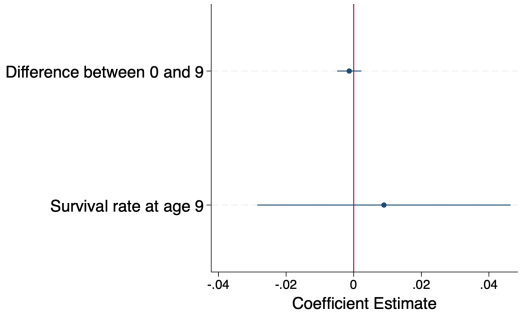
Notes: The figure above shows the demeaned average rate of terrorist attacks that a child was exposed to between 0 and 9 years per cohort accounting for the differences in levels across municipalities. The regions follow the same division as the Colombian Longitudinal Survey.

Figure C.3: Effect of Terrorist Attacks on Survival Rate

(a) Survival Rates

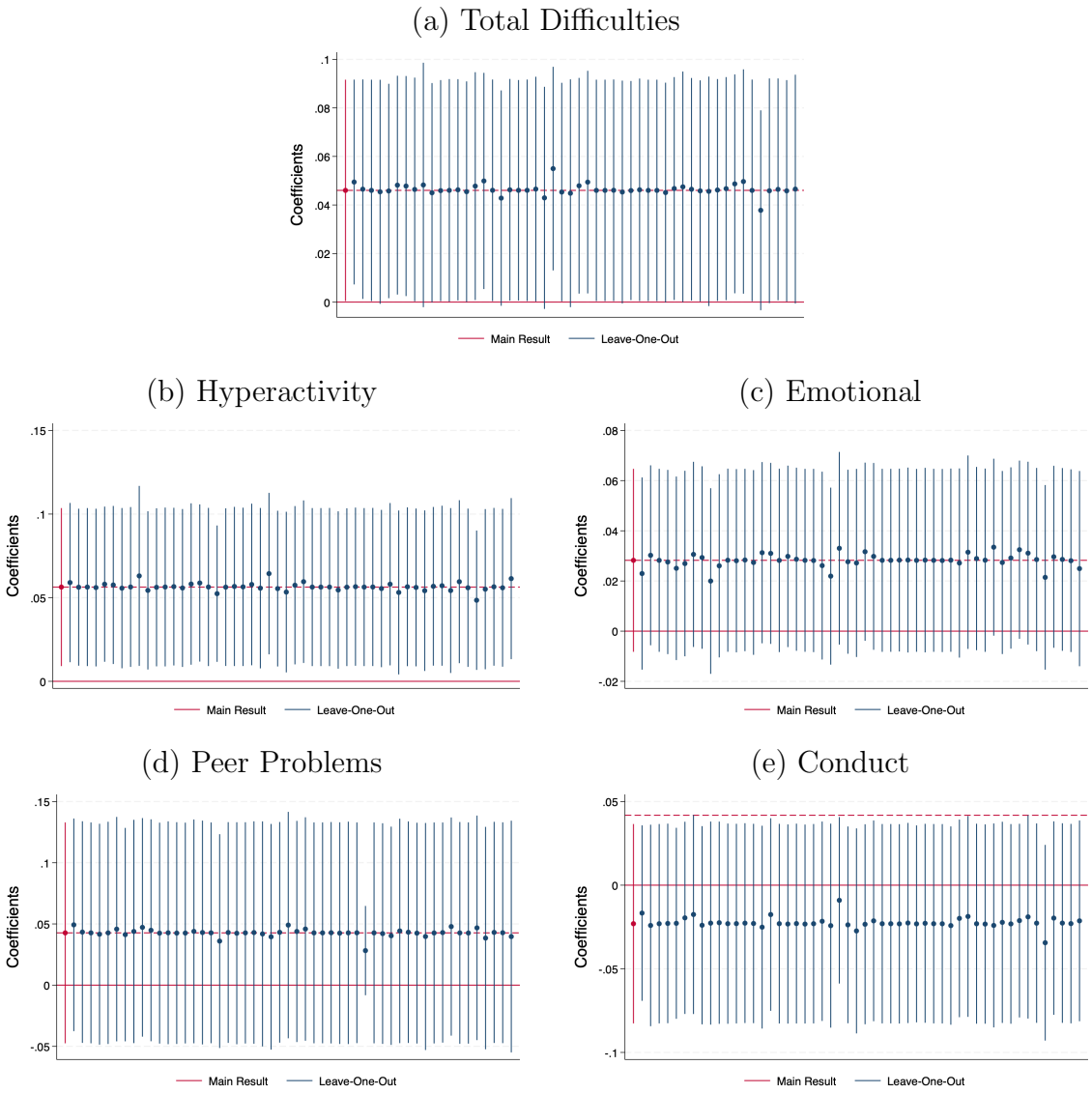


(b) Impacts of Terrorist Attacks



Notes: The figure above shows the impact of the average rate of terrorist attacks per 100,000 inhabitants between 0 and 9 years old on the survival rate of the kids born at the municipality in each cohort. Panel (a) shows the average survival rates for each cohort in the municipalities in the sample. Panel (b) reports estimates from regressions of the rate of terrorist attacks the children in the municipality from a given cohort were exposed to between 0 and 9 years old on the difference between the survival rates at age 9 and age 0, and the survival rate at age 9. Horizontal bars represent 95% confidence intervals. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

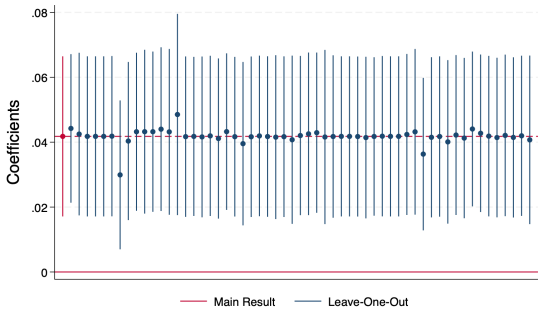
Figure C.4: Leave-one-out Regressions of Socioemotional Skills



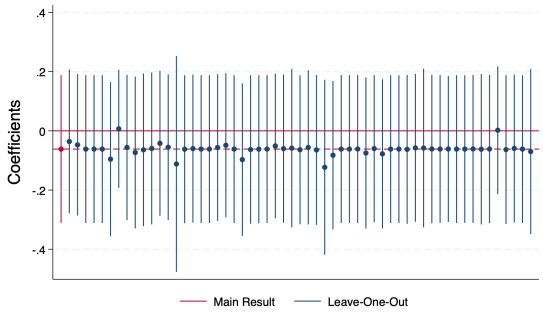
Notes: The "Main Result" estimate (on the left side) uses the specification of the even columns of Table 4. The other lines use the same specification with one municipality ommited from the sample. All models include controls for children's biological sex, education, order within the children of the household, age of caretaker, education of the caretaker, whether the household is a two-parent in 2010, annual logarithm of consumption in 2010, and household size in 2010. Results are weighted by children's ELCA weights. Vertical bars represent 95% confidence intervals. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

Figure C.5: Leave-one-out Regressions of Alcohol Consumption

(a) Ever tried alcohol



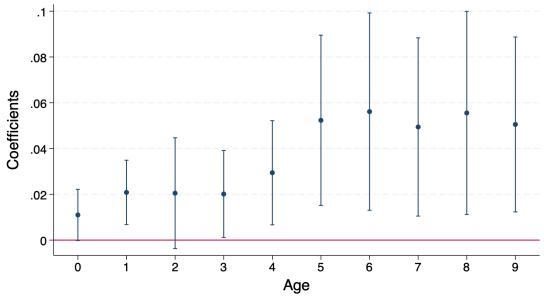
(b) Age of first drink



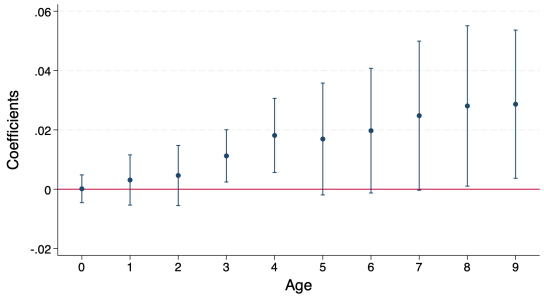
Notes: The "Main Result" estimate (on the left side) uses the specification of the even columns of Table 5. The other lines use the same specification with one municipality ommited from the sample. All models include controls for children's biological sex, education, order within the children of the household, age of caretaker, education of the caretaker, whether the household is a two-parent in 2010, annual logarithm of consumption in 2010, and household size in 2010. Results are weighted by children's ELCA weights. Vertical bars represent 95% confidence intervals. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

Figure C.6: Effects of exposure up to certain age

(a) Socioemotional Skills (Total Score)



(b) Ever Tried Alcohol



Notes: The table above reports estimates from regressions of the rate of terrorist attacks a child was exposed to up to a certain age. For example, the estimate for 1 uses the rate between 0 and 1 years old, while the estimate for 7 uses the rate between 0 and 7 years. This figure is a more general version of Tables 6 and 7. All models include controls for children's biological sex, education, order within the children of the household, age of caretaker, education of the caretaker, whether the household is a two-parent in 2010, annual logarithm of consumption in 2010, and household size in 2010. *** indicates significance at the 1 percent level, ** at the 5 percent level, and * at the 10 percent level. Results are weighted by children's ELCA weights. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

Table C.1: Summary Statistics by cohort

	2000	2001	2002	2003
A. Adolescents characteristics				
Sex (1 = Male)	0.550	0.470	0.516	0.446
	(0.499)	(0.500)	(0.501)	(0.499)
Age in years	15.18	14.40	13.38	13
	(0.388)	(0.490)	(0.487)	(0)
Years of education	8.061	7.382	6.393	6.069
	(1.536)	(1.461)	(1.475)	(0.958)
B. Household characteristics				
Two parent household	0.558	0.550	0.604	0.585
	(0.498)	(0.498)	(0.490)	(0.495)
Household size	5.503	5.407	5.495	5.246
	(2.396)	(2.296)	(2.974)	(1.817)
Total anual expenditure (in millions)	17.15	16.35	14.78	13.44
	(24.29)	(32.27)	(13.96)	(15.00)
C. Caretaker characteristics				
Age	42.52	42.31	41.34	39.46
	(8.364)	(8.445)	(8.193)	(7.754)
Years of education	8.913	9.315	8.688	9.433
	(4.346)	(4.336)	(4.500)	(4.355)
Participation in social organizations (Number)	0.273	0.218	0.175	0.205
	(0.563)	(0.531)	(0.507)	(0.493)
Leader in a social organizations (Number)	0.105	0.0877	0.0706	0.0787
	(0.405)	(0.326)	(0.344)	(0.298)

Notes: The table above reports summary statistics of the municipalities and adolescents in the sample by cohort. It includes adolescents's characteristics and those of their households and caretakers. The table only includes the municipalities in the sample of analysis, not all of the country. Adolescent variables are from the 2016 survey, while household and caretaker characteristics are from the baseline (2010).

Table C.2: Summary Statistics by region

	Atlantic	Eastern	Central	Pacific	Bogota
A. Adolescents characteristics					
Sex (1 = Male)	0.530	0.488	0.507	0.492	0.422
	(0.500)	(0.501)	(0.502)	(0.502)	(0.496)
Age in years	14.11	14.06	14.09	14	13.79
	(0.928)	(0.890)	(0.847)	(0.843)	(0.790)
Years of education	6.837	7.227	6.882	6.992	7.312
	(1.880)	(1.465)	(1.471)	(1.351)	(1.215)
B. Household characteristics					
Two parent household	0.570	0.643	0.380	0.574	0.672
	(0.496)	(0.480)	(0.487)	(0.497)	(0.471)
Household size	6.134	5.086	5.168	5.082	4.844
	(2.815)	(2.699)	(2.175)	(1.909)	(1.471)
Total anual expenditure (in millions)	12.56	19.32	13.06	12.69	22.70
	(13.08)	(38.37)	(13.55)	(9.566)	(29.91)
C. Caretaker characteristics					
Age	42.35	40.84	42.35	40.24	41.76
	(8.787)	(6.977)	(8.541)	(8.465)	(8.483)
Years of education	8.425	9.245	9.550	8.864	10.02
	(4.839)	(4.144)	(4.246)	(3.907)	(4.014)
Participation in social organizations (Number)	0.265	0.205	0.163	0.136	0.228
	(0.542)	(0.514)	(0.464)	(0.412)	(0.638)
Leader in a social organizations (Number)	0.0948	0.0800	0.0853	0.0254	0.122
	(0.345)	(0.338)	(0.354)	(0.158)	(0.454)

Notes: The table above reports summary statistics of the municipalities and adolescents in the sample by region. It includes adolescents's characteristics and those of their households and caretakers. The table only includes the municipalities in the sample of analysis, not all of the country. Adolescent variables are from the 2016 survey, while household and caretaker characteristics are from the baseline (2010).

Table C.3: Effects of Terrorist Attacks on Smoking

	Own Smoking		Friend's smoking	
	(1)	(2)	(3)	(4)
A. Within-Municipality Cross-Cohort Variation				
Terrorist Attacks 0-9 years old	-0.007	-0.007	0.003	0.010
	(0.007)	(0.006)	(0.011)	(0.012)
Terrorist Attacks after 10 years old	-0.004	-0.003	-0.020	-0.006
	(0.023)	(0.021)	(0.016)	(0.016)
Municipality FE	Yes	Yes	Yes	Yes
B. Nearest Neighbor Match				
Terrorist Attacks 2000-2016 > Median		0.070***		-0.134***
		(0.000)		(0.001)
Municipality FE	Yes	No	Yes	No
Mean of Dependent Variable	0.0926	0.0926	0.376	0.376
Observations	870	870	702	702
Controls	No	Yes	No	Yes
Cohort FE	Yes	Yes	Yes	Yes

Notes: Panel A in the table above reports estimates from regressions of the rate of terrorist attacks a child was exposed to between 0 and 9 years old on Smoking Outcomes. All models include controls for children's biological sex, education, order within the children of the household, age of caretaker, education of the caretaker, whether the household is a two-parent in 2010, annual logarithm of consumption in 2010, and household size in 2010. *** indicates significance at the 1 percent level, ** at the 5 percent level, and * at the 10 percent level. Results are weighted by children's ELCA weights. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

Table C.4: Effects of Homicides on Socioemotional Skills

	Total Score	Hyperactivity	Emotional	Peers problems	Conduct
	(1)	(2)	(3)	(4)	(5)
Homicide rate 0-9 years old	0.000	-0.001	0.003*	0.001	-0.002
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)
Mean of Dependent Variable	8.811	3.355	1.939	1.300	2.227
Observations	856	856	856	856	856
Controls	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes

Notes: The table above reports estimates from regressions of the rate of homicides a child was exposed to between 0 and 9 years old on Socioemotional Skills Scores. All models include controls for children's biological sex, education, order within the children of the household, age of caretaker, education of the caretaker, whether the household is a two-parent in 2010, annual logarithm of consumption in 2010, and household size in 2010. *** indicates significance at the 1 percent level, ** at the 5 percent level, and * at the 10 percent level. Results are weighted by children's ELCA weights. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.

Table C.5: Effects of Homicides on Alcohol Consumption

	Ever tried alcohol	Age of first drink
	(1)	(2)
Homicides 0-9 years old	-0.0000	-0.0028
	(0.0012)	(0.0045)
Mean of Dependent Variable	0.643	12.84
Observations	870	495
Controls	Yes	Yes
Cohort FE	Yes	Yes
Municipality FE	Yes	Yes

Notes: The table above reports estimates from regressions of the rate of homicides a child was exposed to between 0 and 9 years old on Alcohol Consumption Outcomes. All models include controls for children's biological sex, education, order within the children of the household, age of caretaker, education of the caretaker, whether the household is a two-parent in 2010, annual logarithm of consumption in 2010, and household size in 2010. *** indicates significance at the 1 percent level, ** at the 5 percent level, and * at the 10 percent level. Results are weighted by children's ELCA weights. Standard errors are corrected for heteroskedasticity and are clustered at the municipality level.