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Armed conflict exposure and trust: Evidence from a natural experiment in Turkey*

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Abstract

We study the individual-level effects of exposure to internal armed conflict on social capital, focusing on trust in institutions and in social relations. We introduce new data from a large-N field survey we conducted in Turkey in 2019, exploiting a natural experimental setting that is created by the military institutions and the geography of the long running civil conflict in the country. This setting allows us to identify and analyze the causal impacts of conflict exposure on trust assessments of our respondents in isolation from possible confoundment by conflict-related changes in the socio-economic environment. Results indicate heterogenous effects depending on the type of exposure. We find that while exposure to the conflict environment increases trust, those who directly experience violent events in that environment exhibit lower levels of trust. We document that the results are comparable for two different dimensions of trust, namely institutional trust and social trust. We then show that the effects transmit through exposure-induced changes in an individual's worldviews. Our results highlight the legacies of internal conflicts on beliefs and behavior.

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1. Introduction

Civil conflicts are grave in their economic, political, and social consequences (Collier et al. 2003; Collier and Hoeffler 2004; Blattman and Miguel 2010). In addition to the destruction of physical and human capital they cause, they are also often associated with the destruction of social capital and the resultant state fragility. Social capital is broadly defined as the set of connections among individuals, and the social networks and norms of reciprocity and trustworthiness that arise from them (Putnam, 2000). It is thus a key resource whose accumulated levels determine the strength of cohesion in a society (Oxoby, 2009). Given that social cohesion is “the glue that holds a society together” (Janmaat, 2011), the damaging effects of civil conflicts on social capital then directly translate into state fragility.

As emphasized in its definition, a critical component of social capital is the level of trust people put in others and in the social networks and institutions that surround them. Civil conflicts can alter that level in different ways (Carmil and Breznitz, 1991; Tedeschi and Calhoun, 2004; Janoff-Bulmann, 1992). People may lose trust when faced with the possibility that others around them can produce violence, and that those social and political networks and institutions can fail to protect them from such violence. It is also possible, however, for violence to further catalyze social ties and strengthen collective action if the difficulties of war increase the returns to cooperation and lead people to band together. What is important is that all these possible changes in the level of trust individuals have in others and in the social structures that surround them then feed back into the prospects host societies have for peaceful conflict resolution, for strong post-conflict recovery, and for stability.

As an integral component of social capital and a prerequisite of social cohesion, trust plays a vital role in economic development. By solving cooperation and coordination problems in market interactions, trust has been shown to foster economic growth, financial market development, entrepreneurship, and trade (Knack and Keefer, 1997; Guiso et al., 2006; Algan & Cahuc, 2010; Doepke & Zilibotti, 2013). Similarly, trust in political and social institutions has been associated with institutional quality, political participation, and stability of democracy (La Porta et al., 1997; Bigombe et al., 2000; Tabellini, 2008). Therefore,

understanding the legacies of conflict on trust is crucial for the establishment and maintenance of peace and social welfare.

This paper contributes to that understanding in significant ways by investigating the effects of exposure to armed conflict on the levels of trust individuals display for others and for institutions. Experiences of violent conflict are likely to have persistent effects on trust by disrupting what people know or believe about the social structures of the surrounding world (Cook et al., 2005; Janoff-Bulman, 1992). However, the link between conflict and trust has been found to be complex and ambiguous. On the one hand, exposure to war violence has been associated with a decrease in trust. Recent studies on citizens of post-conflict areas reported them to be less willing to trust each other and to have lower levels of trust in institutions (Rohner et al., 2013; Cassar et al., 2013; Grosjean, 2014; De Juan and Pierskalla, 2016; Kijewski and Freitag, 2018; Conzo and Salustri, 2019). On the other hand, several studies suggest that war experiences can enhance trust and pro-sociality by inducing positive transformations of personal outlooks and social relations, sometimes referred to as *posttraumatic growth* (Tedeschi and Calhoun, 2004; Bellows and Miguel, 2006; Blattman 2009; Voors et al., 2012; Gneezy and Fessler, 2012; Bauer et al., 2016).

Our paper adds to this discussion with an innovative design that allows for causal analyses of the impact of conflict exposure on trust in a detailed and comprehensive manner. To this end, we introduce and analyze data from a large-N survey study we conducted in Turkey in 2019, exploiting a unique natural experimental setting that is created by the military institutions and the long running civil conflict in the country. This setting enables us to identify causal links between conflict exposure and trust without falling into traps of possible endogeneity and selection biases, and to isolate the effects we observe from other conflict-induced changes in the socio-economic environment that may confound the results by producing observationally equivalent outcomes. Our results indicate heterogeneous effects depending on the type of conflict exposure. We find that while exposure to the conflict environment increases trust, those who directly experience violent events in that environment exhibit lower levels of trust. We document that the results are comparable for two different dimensions of trust, namely *Social Trust*, measured as trust in people in general, and *Institutional Trust*, measured as trust in public institutions and private organizations. We then continue to show that these effects transmit through changes in

worldviews. Following Janoff-Bulman's (1992) theory on how traumatizing experiences shatter one's positive outlook on life, we argue that while surviving an armed conflict environment without a major mishap might reinforce one's positive assumptions about life, directly experiencing traumatizing violence in that environment is likely to lead to an erosion of trust in the "benevolence of the world". We argue that it is this differential change in worldviews that explains the heterogeneous effects we observe. We provide corroborating evidence for this interpretation by showing that the experience of traumatizing violence is positively associated with scales of depression and insecurity, which in turn negatively correlate with our trust measures.

Studying armed conflicts and their individual-level consequences comes with a number of empirical challenges. The most important difficulties relate to non-random selection and endogeneity (Blattman and Miguel, 2010). The possibility that individuals might be systematically self-selecting into conflict exposure on the basis of their pro-social inclinations makes it difficult to assign causal interpretations to any observed association between exposure and trust levels. Tracking individual level conflict exposure and identifying proper treatment and control groups pose another challenge. In many cases, and especially in cases where community-level exposure measures are used, both groups contain individuals who were exposed at various degrees, and consequently, the true impact of conflict exposure remains concealed (Jakiela and Ozier, 2019). Relatedly, attrition biases due to non-random migration patterns and deaths rates (Grosjean, 2014; Conzo and Salustri, 2019), and other possible conflict-induced changes in the socio-economic environment make it difficult to isolate the direct individual-level effects of the experience of violence from changes in the structure of the population and/or from reactions people might be giving to their conflict-affected socio-economic environment. This confounding hurts the identification of the underlying mechanisms, and as such, complicates the design of effective post-conflict recovery policies.

Measuring trust is a challenging task as well. One alternative is to elicit measures using incentive compatible experimental methods, however, because it is very difficult to conduct large-scale experiments in conflict contexts, scholars usually work with small, non-random samples with very limited representativeness and/or conduct their experiments by taking subjects out of their natural environment (Cassar et al., 2013; Bellows and Miguel,

2006; Voors et al., 2012). Alternatively, they use existing survey data on individual perceptions and attitudes which often comes along with the mentioned limitations of non-random selection into treatment and possible confounding of results as most of these studies are unable to control for pre-existing trust levels (De Juan and Pierskalla, 2016; Kijewski and Freitag, 2018)¹.

The Turkish case gives us a one-of-a-kind opportunity to overcome these challenges. Turkey has a conscription army that mandates every male citizen to serve in the army when he comes to age. The drafted young men get assigned to military bases all around the country via an assignment lottery, with a significant portion getting assigned to bases in eastern and south-eastern Turkey where an ethnic civil conflict has been going on since 1984 between the Turkish state and the Kurdish separatist guerrilla organization Kurdistan Workers' Party (PKK). These young men thus become combatants in this deadly armed conflict only to be sent back to their civilian lives in their peaceful hometowns at the end of their terms. The Turkish setting, with its mandatory military service requirement that creates combatants from civilians, the lottery mechanism that randomly assigns the drafted young men to military bases all over the country, and the geographically concentrated civil conflict that has been going on for more than 35 years, creates a natural experiment in which individuals get randomly exposed to an armed conflict for a significant period of their lives. Therefore, this setting enables us to avoid endogeneity and selection issues and to identify the unbiased causal effects of conflict exposure on individual attitudes and behavior. By sampling from peaceful western districts, we are also able to measure isolated, individual-level exposure during military service; to construct clean treatment and control groups; to eliminate explanations based on the possible conflict-induced changes in the socio-economic environment; and to attribute the effects we observe in our study to individual-level mechanisms.

Our results are derived from a field survey we conducted with 5,024 randomly selected adult male respondents in western Turkey in the summer and fall of 2019. We designed the survey to explore the individual-level effects of getting exposed to the armed violence of the long running civil conflict in the country and the underlying mechanisms that may transmit these effects. Building on the rich information we collected about military

¹ See Rohner et al. (2013) and De Luca and Verpooten (2015a, 2015b) for a rare exception.

service experience, we measure exposure to conflict in a detailed, objective, and individual-specific fashion. Our first measure focuses on the level of exposure to the conflict environment as given by the intensity of the conflict at the place and time of a respondent's military service. Our second measure derives from the direct experiences of armed violence individuals had in that environment. In other words, we distinguish between a contextual and a direct type of armed violence exposure. Our trust measures are similarly comprehensive and detailed. We have two separate measures: Our first measure is *Institutional Trust* which is a comprehensive index that captures individual perceptions of a broad set of public and private organizations like the parliament, courts, religious organizations, universities, banks, and private firms. We complement our analyses with a second measure of trust in social relations. *Social Trust* measures perceptions about the trustworthiness of people with which one is not familiar (and as such does not have any specific positive or negative ties), and thus it captures a generalized form of trust in people (Glaeser et al., 2000).

Our analysis indicates heterogenous impacts depending on the type of conflict exposure. We believe this heterogeneity can in fact help explain an important part of the variation found in the existing literature. We then show that these heterogenous impacts on trust assessments are most likely explained by differential transformations of a person's outlook on life depending on his type of exposure. We find individuals who experience traumatizing events of armed violence to have more negative worldviews as evidenced by their higher scores on the depression and insecurity scales that we had in our survey. This negative mental state correlates with the lower levels of trust these individuals exhibit in both institutions and people.

Our results provide important insights to the emerging literature on the link between conflict exposure and social capital (Rohner et al., 2013; Cassar et al., 2013; Voors et al., 2014; Bauer et al., 2016; Kijewski and Freitag, 2018). First and foremost, our study design enables us to identify causal links. Our study directly speaks to and takes part in the body of works which, following the work of Angrist (1990) on the Vietnam-era draft lottery, have innovatively identified and employed natural experimental settings created by military institutions to identify a causal impact of combat experience on individual-level outcomes, such as labor market outcomes (Angrist and Chen, 2011), health (Angrist et al., 2010; Autor

et al., 2011), criminal behavior (Galiani et al., 2011) or political attitudes (Grossman et al., 2015; Navajas et al., 2020).

Second, while many existing studies are not able to distinguish contextual from direct conflict experiences, we carefully disentangle these different types of exposure and document heterogeneous effects on trust perceptions.² Third, we explain our findings by providing clear and unconfounded evidence of individual level psychological mechanisms. Most studies measure trust in an environment which itself has been transformed by the conflict, e.g. through economic destruction, or social change due to population movements, or social deterioration due to war atrocities (Rohner et al., 2013; Conzo and Salustri, 2019; De Luca and Verpooten, 2015a, 2015b).³ In such cases, however, it becomes very difficult to identify whether and how conflict exposure changes people. We measure individual levels of trust in locations that have remained almost completely untouched by the conflict. This unique empirical setting might thus explain why our results differ from the group of studies that report positive effects of conflict exposure on pro-social behavior (Blattman, 2009; Bellows and Miguel, 2009). In contrast to these studies, we do not find evidence of any pattern of individual posttraumatic growth and social activation after a traumatic experience (Tedeschi and Calhoun, 2004). Rather, our results suggest that the positive effects of conflict exposure on social capital and political participation found in those studies likely reflect the need for cooperation in post-conflict settings in order to restore community life (Bauer et al., 2016; Bellows and Miguel, 2006; Voors et al., 2014). While these findings are important in their own regard, we offer a different perspective on the impact of conflict exposure on trust by revealing the individual-level transformations in outlook on life that are induced by conflict experiences. This interpretation is in line with research highlighting the adverse legacies of traumatizing events on individual beliefs and behavior, and it relates to studies on war-related distress and post-traumatic stress disorder (Janoff-Bulmann, 1992; Kunovich and

² A recent study that uses both contextual (i.e., aggregated) and direct (i.e., self-reported) conflict experiences is Kijewski and Freitag (2018).

³ A related strand of literature finds negative long-run effects of historical conflicts on current trust levels (Besley and Reynal-Querol, 2014; Nunn and Wantchekon, 2011; Grosejean, 2014). Yet, the transmission channel in these studies is assumed to relate to the economic and institutional legacy of conflicts, rather than individual-level psychological factors. A different strand of literature investigates the lifetime effects of conflict exposure, reporting negative effects of childhood experiences of conflict on trust in later years (Conzo and Salustri, 2019). Again, however, these studies cannot distinguish whether the found effects result from the psychological consequences of conflict or from the macro-level economic and institutional changes in (post-)conflict settings.

Hodson, 1999; Alesina and La Ferrara, 2002). In this regard, our findings also add to the literature on social and political attitudes of ex-combatants (Blattman, 2009; Grossman et al., 2015; Navajas et al., 2020) and they have timely implications for those NATO and American troops who served in places like Afghanistan, Libya, and Iraq over the last two decades.

Further strengthening our arguments about the transmitting role of worldviews, we show that our results are not driven by mistrust towards state security institutions which individuals may hold accountable for their conflict experiences (De Juan and Pierskalla, 2016; Jaeger et al., 2012; Gates and Justesen, 2020). Rather, we show that the differential effects of contextual and direct conflict experiences are very consistent for a broad range of trust assessments, supporting the notion of an encompassing transformation of a person's outlook on life induced by conflict-related experiences.

Overall, we believe our study offers important insights on the social and political legacies of civil conflicts and on how they fundamentally change the way people relate to others and to institutions that surround them. In this sense, our paper also adds to the literature on the (in)stability of individual preferences and on the determinants social and institutional trust (Alesina and La Ferrara, 2002; Hanaoka et al., 2018; Malmendier and Nagel, 2011; Glaeser et al., 2000).

The rest of the paper is organized as follows. Section 2 outlines the experimental setting and the survey design, while section 3 presents our empirical framework and variable descriptions. Section 4 presents our empirical results and mechanism tests. Section 5 concludes.

2. Research Design

2.1 The Civil Conflict in Turkey

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

concentrated in the south-eastern and eastern parts of the country. The geographic pattern of the armed conflict is demonstrated in Figure 1, which shows the distribution of total combatant casualties of the PKK and the Turkish armed forces over the 1984-2018 period (Kibris, 2021).

Figure 1. Geographical distribution of total combatant casualties in 1984-2018



Turkey has a draft army and a mandatory military service system that requires each Turkish man to serve in the army for about 15 months⁴ when he turns 20.⁵ The draftees first go through a basic training program that lasts about a month, then they get sent to military bases all over the country where they serve the rest of their terms. Importantly, they can be assigned to any military base in the country that has room for newcomers except those in their home district, and the assignments are randomly made via a lottery system. The needs and availabilities for newcomers at the different bases are determined by the General Staff and declared to the Ministry of Defence. On this basis, a random matching between the draftees and bases is conducted. While in the 80s and early 90s the matching was literally done via a physical lottery in which people drew names from a bag, in later years a computerized system was installed.⁶ As a result of this lottery assignment system, a significant portion of the drafted young men are randomly assigned to military bases in

⁴ The required length of service varied slightly over the years. We provide details about the changes in regulations in Section 3.2.

⁵ Those still in higher education at age 20 are allowed to have their services postponed until graduation or until they turn 28 depending on whichever comes first.

⁶ An official statement of this lottery system can be found on the information brochures for the prospective draftees by the Army Enrolment Services of the Turkish Defence Ministry (https://asal.msb.gov.tr/Content/Upload/Docs/erbas_er_brosür.pdf).

south-eastern and eastern Turkey and get actively involved in the armed conflict against the PKK. Since the number of assignments depends on the need and room for newcomers at the bases, the size of that portion varies across draft periods (of which there are four every year). Consequently, it is difficult to give an exact estimate of the number of draftees that have been sent to the conflict zone during our study period. However, given that an average of 400 thousand young men are drafted each year for the Turkish land forces, of which about 45% is based in eastern and south-eastern Turkey, roughly 6.5 million of the 15 million young men drafted since 1984 are expected to have served somewhere in the conflict zone (Dünya, 2018; Mater, 1998).

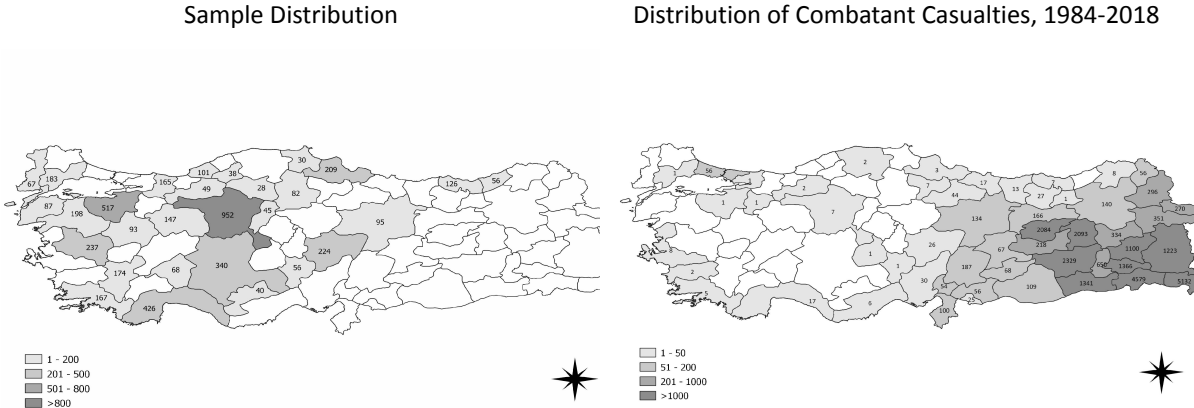
The specific characteristics of the Turkish military institutions in combination with the geography of the civil conflict create a natural experiment in which individuals are randomly exposed to an armed conflict for a significant period of their lives. This setting, therefore, avoids problems of endogeneity between exposure to armed conflict and individual attitudes and behavior. Moreover, because the civil conflict in Turkey has been geographically concentrated in the eastern and south-eastern regions of the country, for those individuals from other, non-conflict regions, time in the army constitutes their only personal exposure to the armed violence of the conflict. At the end of their terms, these young men go back to their civilian lives in their peaceful hometowns. The ability to study such isolated conflict exposure allows us to identify the individual-level changes in trust assessments that result from armed-conflict experiences without the confounding effects of conflict-induced changes in a person's socio-economic environment.

2.2 Survey Design

Our study is part of a larger project that builds on these important advantages to explore the individual-level political, social, and economic effects of political violence exposure in a civil conflict context. As part of the project, we designed a field survey that was conducted with the help of a professional survey company in western Turkey in 2019 with 5,024 randomly selected adult males at their residential addresses. At each randomly selected address, the eligible participant was the "man of the house" who completed his

military service⁷ sometime between 1984 and 2014⁸. The sample of eligible addresses was randomly selected from 29 western districts outside the conflict zone in proportion to district populations by the Turkish Institute of Statistics (TUIK). More precisely, we only sampled from western districts that remained peaceful in the 1984-2018 period⁹; have at most 15% of its current resident population born in a district in Eastern (NUTS1) Turkey; and are representative of the socioeconomic structure of their region. Figure 2 maps the sample distributions alongside the distribution of combatant casualties to visualize the clear separation between the sampling and the conflict zone.

Figure 2. Sampling distribution versus the distribution of combatant casualties



The survey questionnaire was designed to collect information on a wide array of economic, social, and political attitudes including trust in institutions and in people. Interviews were conducted in Turkish in respondents’ addresses by extensively trained interviewers. The response rate, calculated as the number of completed questionnaires

⁷ We excluded those who were exempt or served an irregularly short period of time due to special circumstances such as health problems.

⁸ We focused on the 1984-2014 period both because the 90s was the most intense period of the conflict and because the Turkish army has been going through structural changes since 2014. With new legislation enacted in December 2014, the army instituted what is called “contract soldiers” and started to employ professional soldiers on fixed term contracts. Even though the Turkish General Staff never officially declared or admitted so, the rumour on the street is that these contract soldiers are to replace the draft ones especially in the conflict zone as part of a move towards a professional army. The Turkish State-PKK conflict event dataset (TPCONED) (Kibris, 2021) supports these rumours as most security force casualties of the conflict after 2014 are professional soldiers. Moreover, with enough professional soldiers in place, regulations were relaxed after 2018 to allow civilians to pay their way out of military service.

⁹ We define “peaceful” as having less than 6 minor conflict events in the 1984-2018 period. Mean number of total conflict events in the 1984-2018 period in districts outside the eastern regions (NUTS1) is 6, whereas it is 281 in eastern districts (Kibris, 2021).

divided by the number of addresses in which eligible men had been identified, was 83%¹⁰. Informed consent was obtained from all participants. Ethical approvals were received from the European Research Council Executive Agency, the Humanities and Social Sciences Research Ethics Committee of the University of Warwick and the Research Ethics Committee of Sabancı University. We also conducted a pilot with 250 randomly selected participants to test the questionnaire and field organization before embarking on the main field study.

To identify exposure to the armed conflict we asked our respondents when, where and for how long they had served in the army. We also asked them about their specific experiences of armed violence during service. In Turkey, military service is culturally highly revered and associated with manhood and patriotism. Being a significant experience in a man's life, individuals usually remember it in detail, and it is a common topic of conversation. In fact, of the 5,024 respondents in our survey only 5 did not answer the questions on their military service. Figure 3 maps the geographical distribution of the military placements of our respondents at the district level.

Figure 3. Geographical distribution of military placements of respondents



It is important to emphasize that, because the mandatory military service imposes serious risks for those serving in the conflict zone, the assignment system and its fairness have always been under scrutiny by the public and the media in Turkey, especially in periods of high conflict intensity as more draftees lost their lives or got seriously injured in clashes.

¹⁰ Compared to Europe and North America, survey response rates are usually high in Turkey due to cultural reasons, but we would also like to credit the questionnaire design, the field organization, the intense and effective interviewer training, and the trust and acclaim the public holds for the partner Sabancı University for the welcome we received.

Therefore, the randomness of base assignments is a feature of the drafting system that has always carried substantial political costs. Consequently, the Turkish Ministry of Defence and the General Staff emphasize in all their communications that the system does not discriminate. The non-discriminatory nature of the system is also supported by the fact that the list of fallen soldiers in the conflict zone includes close relatives of high-level politicians and army officials.¹¹ Also, the high level of trust our respondents declared for the army attests to the fairness of the system. With nearly 75% indicating high trust, we found the army to be by far the most trusted institution.¹² Finally, the balance tests we present in Section A2 of the Appendix on pre-military characteristics of our respondents indicate no bias in assignments with respect to these characteristics and as such provide further empirical evidence of the randomness of the assignment system.

3. Empirical Framework

3.1 Variables

3.1.1 Conflict Exposure

We construct two measures of exposure to the armed conflict. Our first measure, *Exposure to Armed Conflict Environment (ACE)*, captures the level of exposure to the armed conflict environment. It is the standardized number of combatant casualties during the time of a respondent's military service in the county of the base he was assigned. To obtain data on combatant casualties, we rely on the Turkish State-PKK Conflict Event Database (Kibris, 2021) which includes the exact date, location, and casualty information on each fatal event of the conflict since its beginning in 1984.

ACE reflects variation in the conflict environment a respondent was exposed to with high geo-temporal precision, as this variable captures the intensity of armed clashes in the respondent's base county during the time he was there as a soldier. As such, it has two important advantages. First, compared to measures that rely on a respondent's retrospective and subjective assessment of his armed violence exposure, ACE is substantially more immune to response and recall biases as it is based on objective facts. Moreover, because it

¹¹ A recent example is the (then) secretary of state Mr. Babacan whose cousin died in 2007 in a PKK attack on the Çeltikli outpost in Bitlis while doing his military service.

¹² The percentage of those indicating high trust goes down to 43% for courts and 35% for the parliament.

relies on the respondent's place and time of service and its duration, ACE varies at the individual level. Relatedly, because the mandatory service requirements of the Turkish system legally enforce the continuous presence of each recruit in the place and over the duration of his service, ACE does not allow any possible unobserved movements across different environments. Thus, the variable captures unambiguous exposure to the conflict environment defined by those geo-temporal parameters.

The geo-temporal variation in conflict exposure as measured by ACE is determined by four exogenous and individual-specific components. The first component is timing which is determined by the date of service in the army, and given the age requirement in the law, it is determined by birthdate. The second component is duration which is determined by length of service as dictated by the regulations in place at the time when an individual is drafted. The regulations about the required length of service were changed four times over the period we study. During the 80s, the requirement for a rank-and-file soldier was 18 months of service, which was taken down to 15 months in 1992, and brought back to 18 months in 1995. It was reduced back to 15 months in 2003 and was finally cut down to 12 months in 2014. The third component is the intensity of armed clashes around the base during service which we measure by the number of combatant casualties. Because a single individual has no control or influence over his birthdate, or the timing or content of any legislation change, or the conflict events that are to happen around his base while he is in the army, these three components are, by definition, exogenous. Finally, the fourth component is the location in terms of the county of the military base a draftee is assigned to. As we discuss in detail above, this last component is also exogenous since it is determined randomly by the assignment lottery. Hence, ACE identifies exogenous and individual-specific exposure to the conflict environment.

Apart from exposure to a certain conflict-inflicted environment as measured by ACE, we also assessed respondents' personal experiences with the armed violence in that environment. To this end, we asked our respondents whether they ever got wounded in armed clashes or anyone around them got killed or hurt in armed clashes during their military service. Our second measure of conflict exposure, *Traumatic Direct Experiences (TDE)*, is a binary variable that takes on the value 1 in the case of any such experience. In our sample, two percent of our respondents declared they got wounded in armed clashes and 15

percent reported that others around them got killed or hurt during their military service.¹³ Admittedly, asking respondents about retrospective events bears the risk of introducing response and recall biases into our analysis. For this reason, we included in our survey only binary questions on the mere occurrence of such events, rather than assessing the degree of physical damage encountered. In this way, we minimize the potential of any bias due to subjectivity. Similarly, TDE might suffer from endogeneity if people with certain characteristics self-select into different levels of violence exposure by choosing how much risk they take in dangerous situations. As the results of the balance tests which we present in Table 3 below demonstrate, our data does not indicate any significant difference between those respondents who got hurt in armed clashes during military service and others in terms of their pre-military characteristics. Nonetheless, we also present in the Appendix our main analyses on trust levels with an alternative traumatic experiences measure defined as a binary indicator of observing a fellow soldier get hurt or killed in armed clashes. This alternative measure, which still captures a major traumatic experience, is expected to be more immune to any possible self-selection into violence as it is about a misfortune that had happened to someone else.

In her book, which contains in-depth interviews with 42 such individuals who had served in bases in the conflict zone, Merter (1998) presents detailed qualitative accounts of the experience that our exposure measures are designed to capture quantitatively: “It was only 2-months into my term. I got the night watch. I was told that terrorists had cut the head off a soldier who had fallen asleep on watch right here. It was pitch dark and I was alone. It was the scariest experience of my life.” (p. 40); “Attacks on bases were very common. Suddenly bullets start raining from the sky, the whole world shakes (p.43) ... This should be done by professional soldiers not ordinary civilian kids like us.” (p.45) As described in these anecdotes, being a soldier in the conflict zone means immersion in a tense, scary and fatally risky combat zone with high military vigilance. Unfortunately, for a significant portion of draftees, the experience also involves direct traumatic violent events like getting hurt or having others around get hurt: “Ahmet was a reserve officer with an MA degree in economics. He shows a photo of a mountainous terrain, this is where his friend got shot by

¹³ Not surprisingly, one is more likely to experience violent events in high conflict intensity locations. However, because the percentage of those with such experiences is low, the correlation between ACE and TDE is only 0.25.

the PKK. "It took the helicopter 5 hours to get to us, my friend was dead by then." (p.9). As described in these anecdotes, draftees sent to the conflict zone get immersed in a tense, scary and fatally risky combat zone with high military vigilance. We design ACE as a measure of this immersion. Unfortunately, in many cases the experience also involves getting hurt or having others around get hurt. We design TDE to as a measure of such traumatic experiences.

3.1.2 Trust

The aim of this study is to improve our understanding of how exposure to violent conflict affects the way people relate to their social environment. To this end, rather than focusing on a single institution or an ambiguous collection of people, we use a rich array of trust assessments that respondents declare for the institutions and for the social networks that surround them respectively. To have a comprehensive conceptualization, we analyze these two levels separately, and thus we employ two measures of trust as our dependent variables: *Institutional Trust* and *Social Trust*.

Institutional trust is the simple average of answers to a set of 14-questions which requires respondents to indicate on a 5-point Likert scale their level of trust in the army; the judiciary; the parliament; TV channels; newspapers; political parties; the clergy; the universities; environmental organizations; charities; the police; banks; private companies and the EU respectively. This measure captures a wide range of formal organizations associated with both the public and private sphere and with different governance levels. In this sense, it provides a comprehensive measure of the institutions and organizations that structure an individual's life, and it carefully avoids drawing too much emphasis on specific state-level institutions that might be associated directly with the conflict experience such as the military. While there is a literature linking conflict exposure and political trust based on accountability arguments (De Juan and Pierskalla, 2016; Gates and Justesen 2020), we believe that our measure of institutional trust is better suited to capture the overall changes in individual-level perceptions of the trustworthiness of the surrounding organizational structures. Yet, to investigate the link between conflict exposure and institutional trust in more detail and to provide a more comprehensive picture, we also report in the appendix

Table A6 separate results for each of the dimensions included in our institutional trust variable. In addition, our results do not change substantially when we exclude one dimension at a time from our composite trust index.¹⁴

To measure social trust, we relate to the literature on *generalized* trust. This literature most commonly measures trust by questioning whether “other people” can generally be trusted (Alesina and La Ferrara, 2002; Rohner et al, 2013; Conzo and Salustri, 2019).¹⁵ Such a grouping is however, “vague, abstract, and hard to interpret” (Glaeser et al. 2000, p. 812), and it leaves room for heterogeneous associations depending on the respondents’ background, especially in terms of ethnic, political or national associations of in-groups and out-groups. Since a growing body of literature suggests that conflict exposure affects in-group and out-group trust very differently (e.g. Bauer et al., 2016; Ingelaere and Verpoorten, 2020), these questions will produce ambiguous results and might hide heterogeneity arising from parochialism.

To have a more comprehensive, detailed, and accurate picture we build our main measure of social trust on a question that required our respondents to indicate on a 5-point scale how much they trusted people they are not familiar with. Note that this question significantly improves upon the “other people” designation and dissipates the ambiguity of association by explicitly asking respondents to consider people they are not familiar with. In this way, we also seek to minimize any in-group or out-group association, in particular with regard to ethnic divisions. Our approach also links to a recent literature that employs more fine-grained questions on social trust (Kijewski and Freitag, 2018; Ingelaere and Verpoorten, 2020).

While asking respondents about their trust in strangers clearly removes any specific in-group bias, it might capture some out-group association. Therefore, we complement our analysis with variables that specifically assess trust in friends and in family to investigate whether there are any in-group differentials in the effects of conflict exposure. These variables are constructed analogously by asking respondents to indicate on the same 5-point

¹⁴ Results available upon request.

¹⁵ The corresponding question used, e.g. in the Afrobarometer or in the US General Social Survey, states: “Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?” (Alesina and La Ferrara, 2002; De Luca and Verpoorten, 2015b).

scale how much they trusted their friends and their family, respectively.¹⁶ We present in the Appendix how conflict exposure is associated with these different measures of social trust. In this way, we are able to provide tentative evidence on how our results relate to empirical findings on parochial altruism and in-group favoritism.

3.1.3 World Assumptions

Psychologists argue that, to make life intelligible, we all work with a set of fundamental assumptions about ourselves, our external world, and our relation to it (Parkes, 1975; Epstein, 1984). At the very core, those assumptions can be summarized as our belief in the benevolence, meaning, and safety of the world (Janoff-Bulman, 1992). Our experiences in life might strengthen or weaken these core assumptions. Following these insights that we obtain from the psychology literature we explore the channels by which armed-conflict exposure changes trust assessments of individuals by focusing on two proxies that are likely to reflect transformations in a person's fundamental assumptions about the safety and benevolence of the social world: Symptoms of depression and feelings of insecurity. We measure depressive symptoms using the 6-item depression subscale of the Brief Symptoms Inventory (Derogatis, 1992) used previously in studies of war veterans in Israel and Turkey (Dekel et al., 2014; Guloglu, 2016) as well as in studies on civilian populations in Turkey (Sahin and Durak, 1994). Our measure is the simple average of answers to the 6 questions that make up the scale and require respondents to indicate on a 5-point Likert scale how often they felt lonely; indifferent; sad; worthless; hopeless; and had suicidal thoughts, within the previous week. Second, we assess the extent to which a respondent feels insecure based on the simple average of answers to a set of 8 questions (Vélez et al., 2016) which requires respondents to indicate on a 5-point Likert scale how secure they feel in their living environment.

¹⁶ The survey included other questions related to social trust (like trust in *people from other religions*). However, those questions suffer from the same criticisms regarding vagueness and abstractness as they leave room for ambiguity and associational differences across respondents. Moreover, we believe that the question on trust in strangers fully captures the generalized measure of trust we are aiming at. Therefore, we do not include them in our analyses. However, results do not change in any substantive way when, instead of focusing on trust in strangers, we instead work with the average level of trust indicated across all these questions (results are available upon request).

3.1.4 Control variables

Alongside our conflict exposure measures, we also include in our statistical models age, education and minority status as pre-treatment controls that might be associated with trust levels. *Age* is the age of the respondent at the time of the survey¹⁷, *Minority* is a dummy variable that takes on the value 1 if the respondent belongs to an ethnic minority, and *Education* is a categorical variable that ranges from 1 (received no schooling) to 16 (PhD graduate) and measures the education level of the respondent.

Table 1 presents summary statistics of our data. It shows the mean, standard error, minimum, maximum, and median for each variable we use in this study as well as the number of observations. The corresponding survey questions and the derivation of variables are presented in detail in the Appendix.

¹⁷ Age (at the time of the survey) is a pre-treatment variable because it is determined by birth year.

Table 1. Summary statistics

	Mean	Standard error	Min	Max	Median	Number of observations
Conflict exposure						
Exposure to the Armed Conflict Environment (ACE) (standardized)	0	0.014	-0.21	22.81	-0.21	5,019
Traumatic Direct Experiences (TDE)	0.155	0.005	0	1	0	5,005
Institutional Trust						
Composite index	2.517	0.011	1	5	2.50	5,010
Trust in the army	4.057	0.018	1	5	5	4983
Trust in the judiciary	3.057	0.020	1	5	3	4973
Trust in the parliament	2.833	0.020	1	5	3	4987
Trust in TV channels	2.019	0.016	1	5	2	4997
Trust in newspapers	1.963	0.016	1	5	2	4996
Trust in political parties	2.029	0.016	1	5	2	4982
Trust in the clergy	2.432	0.019	1	5	2	4990
Trust in the universities	2.777	0.019	1	5	3	4959
Trust in environmental organizations	2.416	0.018	1	5	2	4969
Trust in charities	2.353	0.018	1	5	2	4976
Trust in the police	3.497	0.020	1	5	4	4988
Trust in banks	2.063	0.017	1	5	2	4990
Trust in private companies	1.958	0.016	1	5	2	4981
Trust in the EU	1.759	0.016	1	5	1	4963
Social Trust						
Trust in strangers	1.987	0.016	1	5	2	4983
Trust in friends	3.787	0.017	1	5	4	5016
Trust in family	4.707	0.010	1	5	5	5011
Demographics						
Age	42.393	0.104	28	62	42	5,024
Height	175.444	0.098	150	199	175	5,021
Education	6.061	0.038	1	16	6	5,020
Minority	0.094	0.004	0	1	0	5,024
Kurdish ethnicity	0.068	0.004	0	1	0	5,024
World assumptions						
Depression	0.716	0.013	0	4	0.33	5,001
Insecurity	1.544	0.013	-5	5	1.38	5023

3.2 Empirical Specification

We consider the following benchmark estimation equation:

$$Trust_i = \alpha_0 + \beta_1 ACE_i + \beta_2 TDE_i + \gamma X_i + \epsilon_i$$

where i denotes the respondent, and the dependent variable *trust* denotes one of our two measures of institutional and social trust respectively. ACE and TDE reflect our measures of conflict exposure, i.e., *exposure to the armed conflict environment* and *traumatic direct*

experiences, while the vector \mathbf{X} captures the pre-treatment control variables. In line with the sampling design, in our baseline estimations, we cluster standard errors by the living block. Yet, our results do not change when clustering at different levels like the respondent's home district, or region.

As discussed in detail above, our identification strategy relies on the random assignment of draftees to military bases. We present balance tests on pre-military characteristics of our respondents in Table 2 as further empirical evidence that the actual implementation of the base assignment system reflects its randomized and non-discriminatory nature as stated in the official rules and regulations. For the sake of being comprehensive, we conduct these tests with all individual-level pre-treatment characteristics on which we have data, that is age, ethnic background, height, and education level. Randomization implies that draftees assigned to bases in the conflict zone and draftees assigned to bases in conflict-free locations in the west should be similar in terms of these characteristics. To avoid any adhoc definition of the "conflict zone", we use two different classifications in these tests. The first one refers to those eastern districts with more than 50 combatant casualties over the course of the conflict¹⁸ (eastern districts colored by the two darkest shades in Figure 1 in the main text), and the second one refers to the NUTS1 regional classification and designates the districts in the North-eastern, South-eastern, and Central Eastern regions as the conflict zone.

Reassuringly, we find no systematic difference in terms of the probability of getting assigned to the conflict zone for age, ethnic background, and physical attributes (height). We then look into education level. One feature of the military service system in Turkey that we need to emphasize here is that it incorporates some rank and duration differentiation in terms of education level. In contrast to individuals with less than a college degree who are all designated as regular-term rank-and-file soldiers, college graduates¹⁹ can choose to serve as reserve officers under certain conditions. Whether a college graduate serves as a reserve officer depends on the number of reserve officers needed by the army in that draft period, which is usually small and less than the number of college graduate draftees. To balance the demand and supply for these spots, draftees are given a chance to choose between rank and

¹⁸ 50 is the median number of total combatant casualties in districts with casualties.

¹⁹ It must be a minimum 4-year college degree. Therefore, those with 2-year community college degrees do not qualify.

file and reserve office. Because reserve office comes with higher rank and somewhat better conditions in terms of working hours, payment, accommodation etc., those college graduates who choose rank-and-file are then entitled to serve half the regular term to compensate for the lower rank and the less favorable conditions.²⁰ Note that, by incorporating the length of military service, ACE already accounts for this potential variation in duration of exposure.

However, this rank and duration differential leads college graduates to take an assignment lottery with slightly lower odds of assignment to bases in the conflict zone. This is mainly because the need for reserve officers is higher in administrative headquarters of the army forces, most of which, for bureaucratic and strategic purposes, are located in major (western) centers like Ankara, Istanbul and Izmir. In addition, from a strategic perspective, it is better to employ soldiers for a longer period at bases in the conflict zone once they gain combat experience²¹. Therefore, the availabilities in the lottery for college graduates (independent of the rank) are slightly skewed towards western locations, which is confirmed by the balance tests. While 40% of our respondents with less than a 4-year college degree declared to have served in eastern districts, this percentage drops to 30% for college graduates. In line with these statistics, the t-tests indicate that those sent to the conflict zone are less educated on the average. However, the difference disappears when college graduates (9.3% of the sample) are excluded from the sample.

Importantly, although college graduates are given a choice between rank-and-file and reserve office, they are not able to select themselves into Western locations as they are also subject to the same lottery system that randomly assigns draftees to bases. In fact, we show in Table 2 that these two options do not differ in terms of their likelihood of getting assigned to a base in the conflict zone. We have 217 reserve and 252 half-term rank-and-file soldiers in our sample. The results show that the two groups do not significantly differ from each other. Moreover, in what follows, we control for education in all our empirical specifications. Finally, as further proof that this specific feature of base assignment is not biasing our

²⁰ In case the mismatch between supply and demand continues, a lottery is held among the candidates. The Law on Reserve Officers (Law number 1076, <https://www.mevzuat.gov.tr/MevzuatMetin/1.3.1076.pdf>) details the rules, regulations and procedures concerning reserve office.

²¹ As it takes time for a newly drafted soldier to gain combat/field experience, relying on half-term soldiers is less than ideal for bases in the conflict zone.

estimates, we present results for a sample that excludes college graduates (see appendix Table A2).

Table 2. Balance tests

	Conflict zone defined as districts with more than 50 combatant casualties		Conflict zone defined as districts in eastern NUTS1 regions	
	Served in the conflict zone	Served outside the conflict zone	Served in the conflict zone	Served outside the conflict zone
Age				
Mean	42.349	42.425	42.309	42.446
Standard error	0.158	0.138	0.165	0.133
N	2164	2860	1975	3049
t-stat [p-value]	0.365 [0.715]		0.640 [0.522]	
Ethnicity (% Kurdish):				
Mean	0.067	0.069	0.066	0.070
Standard error	0.005	0.005	0.006	0.005
N	2,164	2,860	1,975	3,049
t-stat [p-value]	0.197 [0.844]		0.554 [0.580]	
Height (in cm):				
Mean	175.400	175.477	175.435	175.450
Standard error	0.148	0.131	0.155	0.127
N	2,162	2,859	1,973	3,048
t-stat [p-value]	0.392 [0.695]		0.074 [0.941]	
Education:				
Mean	5.913	6.173	5.885	6.176
Standard error	0.056	0.052	0.058	0.050
N	2,161	2,859	1,972	3,048
t-stat [p-value]	3.376 [0.001]		3.716 [0.000]	
Education (excluding college graduates):				
Mean	5.393	5.473	5.405	5.460
Standard error	0.044	0.039	0.046	0.038
N	1,994	2,559	1,831	2,722
t-stat [p-value]	1.354 [0.176]		0.935 [0.350]	
Rank (% of reserve officer among college graduates):				
Mean	0.550	0.480	0.566	0.479

Standard error	0.038	0.029	0.042	0.028
N	169	300	143	326
t-stat [p-value]	-1.462 [0.144]		-1.755 [0.080]	

All p-values are two-sided.

The results of the balance tests attest to the randomness of deployment locations. We also examine whether there is a selection of draftees into different tasks at their bases which might then introduce a non-random component into their specific experiences during their service and consequently jeopardize the randomness of our second exposure measure, TDE. If certain types are more likely to be selected for more dangerous duties, then the likelihood of getting hurt becomes endogenous to those characteristics. The important thing to note here is that while draftees take on different tasks at their bases ranging from kitchen duty to peripheral patrol, they do not select themselves into these roles. The task assignments are done by the military command at the base at the very beginning of draftees' terms before command officers have time to observe any behavioral characteristics. One might still suspect observable pre-military characteristics such as height, ethnicity, and education to influence these assignments. The balance tests we present in Table 3, however, demonstrate that those respondents who got hurt in armed clashes during military service do not differ in any significant way from others in terms of their pre-military characteristics. Consequently, we see no ground to be concerned about certain types of draftees choosing tasks that can potentially be more dangerous or command officers selecting certain types into such roles.

Table 3. Balance tests on the likelihood of getting wounded

	Not wounded	Wounded
Age		
Mean	42.382	42.967
Standard error	0.105	0.791
N	4,932	92
t-value [p-value]	-0.757[0.450]	
Ethnicity (% Kurdish):		
Mean	0.069	0.054
Standard error	0.004	0.024

N	4932	92
t-value [p-value]	0.534 [0.593]	
Height (in cm):		
Mean	175.42	176.29
Standard error	0.099	0.685
N	4929	92
t-value [p-value]	-1.181 [0.238]	
<hr/> Education:		
Mean	6.064	5.913
Standard error	0.039	0.305
N	4928	92
t-value [p-value]	0.529 [0.596]	

All p values are double sided.

4. Results

4.1 Baseline Results

Table 4 and 5 present our baseline results on the impact of conflict exposure on *Institutional Trust* and *Social Trust*, respectively. The tables present estimates from OLS regressions, including the pre-treatment control variables. Our treatment variables are *Exposure to Armed Conflict Environment (ACE)* and *Traumatic Direct Experiences (TDE)*. In columns (1) and (2), we include ACE and TDE separately in our models. Yet, since we are interested in the conditional effects of different types of conflict exposure, we include both exposure measures in our preferred specification in column (3). Column (4) also includes the interaction of the two measures to test whether the impact of traumatizing direct experiences depends on the intensity of the conflict environment and vice versa.

Interestingly, we find that our two exposure measures have opposing effects, regardless of the specification chosen. While the positive coefficient estimates of ACE suggest that individuals who serve in the army in more intense conflict locations and times become more trusting, those who directly experience traumatizing violent events in that environment display significantly lower levels of trust as reflected by the negative estimates of TDE. The lack of statistically significant coefficient estimates of ACE in column (1) of Table

4 and Table 5 emphasizes the need to distinguish different types of armed conflict exposure: Without controlling for direct conflict experiences, the coefficient estimate of ACE is skewed towards zero, as it captures the heterogeneous effects of conflict exposure on trust levels for both traumatized and non-traumatized respondents. This finding is clearly supported in column (3) of Table 4 and 5, as the coefficient estimates of ACE turn significant as soon as we control for direct traumatic experiences. Importantly, the estimated effects are very similar, both in terms of sign and magnitude, across the different dimensions of trust that we assess implying an encompassing impact of armed conflict exposure on individual trust levels. The results in columns (4) of Table 4 and 5 do not indicate any strong interaction effect. Put differently, the negative impact of traumatic experiences is independent of the level of conflict intensity one gets exposed to.

In Table 6, we also investigate whether the impact of conflict exposure on individual trust levels depends on the time passed since exposure. From a theoretical perspective, it is not clear a priori whether the effect of armed conflict exposure on trust levels changes over time, and the existing evidence is ambiguous in this regard (De Luca and Verpoorten 2015b, Conzo and Salustri 2019). Empirically, however, we do not find any evidence of such a moderating effect in our sample. The interaction of each of our exposure measures with a variable indicating the years passed since military service is not statistically significant in any of the specifications in Table 6, suggesting that the experience of violent conflict events has permanent consequences for how much trust individuals put in the surrounding social networks and institutions.

In sum, our baseline findings are interesting in two different ways. First, they emphasize the need to differentiate between direct experiences of violence and environmental exposure in civil conflict contexts. Direct traumatic experiences of armed violence are associated with substantial reduction in average levels of trust. In contrast, being exposed to a conflict context without experiencing a traumatic event might even increase trust assessments. Second, the empirical findings suggests that the found effects cannot be explained by changes in trust towards single institutions or specific social networks, but rather that the heterogeneous impact of different types of conflict exposure relates to a comprehensive change in underlying attitudes and beliefs. In what follows, we provide several robustness checks and further explore the potential mechanisms.

Table 4. Conflict exposure and trust in institutions

OLS Regressions	(1)	(2)	(3)	(4)
Dependent variable: Institutional Trust				
ACE	0.01 (0.70)		0.02** (2.02)	0.04*** (2.91)
TDE		-0.12*** (-3.55)	-0.14*** (3.87)	-0.13*** (3.69)
ACE*TDE				-0.03* (-1.76)
Age	0.02** (2.16)	0.01** (2.31)	0.01** (2.25)	0.01** (2.25)
Ethnic minority	-0.14** (-1.97)	-0.15** (-2.01)	-0.15** (-2.00)	-0.14** (-2.00)
Education level	-0.02*** (-3.76)	-0.02*** (-3.83)	-0.02*** (-3.74)	-0.02*** (-3.74)
Constant	2.46*** (23.39)	2.47*** (23.60)	2.47*** (23.63)	2.48*** (23.65)
Observations	5001	4987	4983	4983

t-values in parentheses.

Standard errors are clustered at the neighbourhood (bloc) level.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5. Conflict exposure and trust in people

OLS Regressions	(1)	(2)	(3)	(4)
Dependent variable: Social Trust				
ACE	0.02 (1.59)		0.03** (2.43)	0.04* (1.85)
TDE		-0.09** (-2.13)	-0.11*** (-2.65)	-0.11** (-2.57)
ACE*TDE				-0.01 (-0.47)
Age	0.06** (2.55)	0.01*** (2.71)	0.01*** (2.64)	0.01*** (2.64)
Ethnic minority	0.04 (0.06)	0.01 (0.07)	0.01 (0.09)	0.01 (0.09)
Education level	0.02*** (4.16)	0.02*** (4.09)	0.02*** (4.22)	0.02*** (4.21)
Constant	2.70*** (24.18)	2.68*** (24.40)	2.69*** (24.48)	2.69*** (24.50)
Observations	5009	4995	4991	4991

t-values in parentheses.

Standard errors are clustered at the neighbourhood (bloc) level.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6. Conflict exposure and trust - time

OLS Regressions Dependent variable:	(1) Institutional Trust	(2) Institutional Trust	(3) Social Trust	(4) Social Trust
ACE	0.03 (1.49)	0.02** (2.00)	0.03* (1.87)	0.03** (2.49)
TDE	-0.14*** (3.91)	-0.14*** (3.88)	-0.11*** (2.65)	-0.11*** (2.64)
Time since service	0.04** (2.30)	0.04** (2.51)	0.04** (2.09)	0.04** (2.36)
ACE*Time since service	-0.02 (-0.49)		-0.00 (-0.09)	
TDE*Time since service		-0.01 (-0.17)		-0.03 (-0.73)
Ethnic minority	-0.14** (-1.98)	-0.14** (-1.98)	0.01 (0.10)	0.01 (0.09)
Education level	-0.02*** (-3.21)	-0.02*** (-3.20)	0.03*** (4.27)	0.03*** (4.28)
Constant	2.66*** (67.77)	2.66*** (67.93)	2.93*** (66.32)	2.92*** (66.33)
Observations	4983	4983	4991	4991

Time since service is the difference (in years) between 2019 and the year in which the respondent's military service ended.

t-values in parentheses.

Standard errors are clustered at the neighbourhood (bloc) level.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

4.2 Robustness

We apply a series of robustness tests to examine the validity of our results. First, we apply an alternative definition of TDE. Our identification strategy ensures random assignment of draftees both into service locations and into tasks at these locations, which is confirmed by the balance tests presented in section 3.2. Yet, one might still be concerned that, even though soldiers cannot self-select themselves into different tasks, they might self-select into different levels of violence exposure by choosing how much risk they take in dangerous situations. To rule out the possibility of such a bias, we rerun our main analyses on trust levels with an alternative traumatic experiences measure defined as a binary indicator of observing a fellow soldier get hurt or killed in armed clashes. Still capturing a major traumatic experience, this measure is expected to be more immune to any possible self-selection into violence as it is about a misfortune that had happened to someone else.

As the results we present in Appendix Table A1 confirm, our results do not change in any significant way when we replace TDE with this alternative measure.

Second, we re-estimate our baseline model after excluding college graduates from the sample. As discussed above, the deployment of college graduates is slightly skewed towards western service locations. If trust systematically varies by education level, this specific feature of base assignment might bias our estimates. However, as shown in Table A2 in the Appendix, our baseline estimates do not change in any significant way when we exclude college graduates, confirming the validity of our results.

We also obtain very similar results with a Tobit specification that acknowledges the censored nature of our trust measures (See Table A3 in the Appendix). In addition, we estimated alternative models in which we included fixed effects vectors to account for any possibility of heterogeneity across military service locations. Note that such a scenario requires an unobserved characteristic of base locations that would correlate with both the intensity of the conflict and the trust levels of draftees who serve there. While we cannot think of any such variable, for the sake of being extremely cautious, we nonetheless, apply two strategies to address its unlikely presence: First, we include a binary variable indicating whether a respondent's base was located in the conflict zone. Second, we include base-district fixed effects. Yet, to the extent that these variables account for all time-invariant differences across base districts, they are likely to capture an important part of the conflict-related variation in environmental exposure as measured by ACE. Therefore, we do not include these covariates in our baseline model, but we present these analyses in Tables A4 and A5 in the Appendix as confirmations of the robustness of our results.

4.3 Mechanisms

In this section, we investigate the possible mechanisms that might be linking exposure to armed conflict to trust. We build our discussion on important works from the psychology literature based on which we argue that the differential effects we are observing are reflections of overarching changes in the world views of conflict exposed individuals.

Exposure to an armed conflict is a major shock for individuals. And as such, it is expected to have significant effects on their outlook on life, their perceptions, beliefs, and

preferences (Carmil and Breznitz, 1991; Punamaki et al., 1997; Tedeschi and Calhoun, 2004). In her influential book *Shattered Assumptions* Janoff-Bulman (1992) theorizes about the nature of these effects. She argues that at the core of our internal world we hold the fundamental assumptions that the world is benevolent and meaningful and that we are safe in it. Our experiences in life might strengthen or weaken these assumptions. Janoff-Bulman specifically focuses on traumatizing experiences and argues that their main impact is to shatter our positive assumptions about the world along with our trust in the benevolence, meaning, and safety of the outside world.

Innate assumptions people hold about life are, by definition, not directly observable. However, as evident in the theoretical discussion above, trusting attitudes are amongst their primary observable implications. Note that the same discussion also informs us that negative feelings and perceptions about life, loss of meaning, and feelings of insecurity are the other implications in which we can trace a person's outlook on life.

Based on these considerations, we hypothesize that the associations between trust levels and conflict exposure that we find in our sample stem from transformations of a person's innate world assumptions. We apply two different strategies to assess this mechanism.

First, we argue that the negative effects of traumatic direct experiences that we find for both trust measures, i.e., trust in institutions and in social relations, are in line with an interpretation that relates to shattered basic world assumptions. If TDE was found to affect only trust in single institutions like the army, this would point to an interpretation which relates to concerns of accountability (Gates and Justesen 2020). In contrast, if TDE was found to influence only social trust, this would point to an interpretation associated with experiences of comradeship during military service. Yet, as shown in Appendix Table A6, while we find a consistent negative relationship between TDE and a broad range of trust dimensions, we don't see any significant association between our exposure measures and trust in the army. This strongly indicates that the underlying mechanism relates to a more general transformation of a person's abstract beliefs about the world and how he relates to it.

Second, following the argumentation of Janoff-Bulman, we should observe similar effects of traumatic direct experiences on other psychological concepts that reflect a

person's fundamental assumptions about the safety and benevolence of the social world. To assess this implication, we test whether TDE affects two variables that capture symptoms of depression and feelings of insecurity. In tables 7 and 8, we find that respondents who have experienced direct violent events during military service indeed score higher on our depression and insecurity scales. Interestingly, we also find that both the depression index and the insecurity index are negatively and statistically significantly related to our two trust measures. We interpret these results as strong suggestive evidence that direct experiences of conflict-related violence have a pervasive impact on a person's deeply rooted trust in the social world he is surrounded by.

Admittedly, regarding the mechanisms that likely drive the positive association between ACE and trust, the theoretical rationale and the empirical evidence are somewhat less clear. In principle, we can apply the same line of argument made by Janoff-Bulman: While traumatizing experiences shatter our fundamental assumptions about the outside world, surviving an armed conflict environment without a major mishap might be expected to reinforce and even strengthen one's positive world assumptions. Put differently, a more intense conflict environment that a recruit survives might actually provide a stronger signal confirming the recruit's fundamental belief that the world is benevolent, and that he is safe in it even in the face of extreme danger. In this sense, a more intense conflict environment might thus lead to higher levels of trust in the outside world.

While we find evidence for this line of argument regarding our measures of trust in institutions and in people, ACE is not significantly associated with the other proxies of a person's fundamental world assumptions, namely our indexes of depression and insecurity. A possible reason for our failure to observe associations with ACE is that these scales are designed and (are accordingly worded) to identify depression and insecurity, and not positive feelings like happiness or contentment. Consequently, they may be failing to capture such positive feelings that might be elicited by ACE. Another explanation relates to heterogeneous effect sizes: While direct traumatic experiences are expected to have a strong and direct impact on world assumptions, more indirect changes in a person's external environment are likely to have less pronounced effects on fundamental beliefs and attitudes. Yet, there are alternative explanations for the found effects. For instance, whether the experience of a more intense conflict environment translates into increased trust levels or not might be

moderated by the extent to which the social network of a combat veteran appreciates his military service experience as heroic.

Finally, we investigate whether our results, rather than reflecting the proposed mechanism of overarching changes in a person’s worldviews, might be driven by parochialism. A growing body of literature suggests that conflict exposure increases in-group favoritism at the cost of eroding out-group trust (see for an overview Bauer et al., 2016). While this pattern has been observed for both contextual and direct conflict exposure (Cassar et al, 2013; Voors and Bulte, 2014; Ingelaere and Verpoorten, 2020), the heterogenous effect we find for different types of conflict exposure do not suggest that parochial altruism is the (primary) explanatory mechanism driving our results. Yet, the negative effects of traumatic conflict experiences in our analysis might still reflect a reduction in out-group trust if respondents perceived strangers as an out-group category. To assess this alternative mechanism, we provide auxiliary results for two other social groups that are most likely to reflect in-group categories: family and friends. Following the argument of parochialism, traumatic conflict experiences should increase trust in family members and friends. Results are presented in Table 9. Interestingly though, we observe the same pattern of effects on trust in friends as we do for trust in strangers with contextual exposure exerting a positive effect and directly traumatizing experiences having a detrimental one (although the coefficient estimate is not statistically significant). We find trust in family to be independent of contextual exposure, but those with TDE express higher trust in their family members. These findings do not yield strong support for the notion of a parochial mechanism. That the positive effects of ACE prevail for both friends and strangers suggest that the underlying mechanism is not driven by in-group biases or out-group discriminations. And we interpret the positive coefficient estimate of TDE on trust in family as part of a coping mechanism through which conflict-exposed individuals seek to re-create a safe and trustworthy social space that is built upon only those that are closest to them.

Table 7. Conflict exposure and insecurity

OLS Regressions	(1)	(2)	(3)
Dependent variable:	Insecurity index	Trust in institutions	Trust in people
ACE	-0.01 (-0.42)	0.02** (2.01)	0.03** (2.48)
TDE	0.16*** (3.03)	-0.13*** (-3.65)	-0.09** (2.19)

Insecurity index		-0.03*	-0.11***
		(1.85)	(5.83)
Age	-0.01***	0.01**	0.01**
	(-3.63)	(2.11)	(2.27)
Ethnic minority	0.13*	-0.14*	0.02
	(1.84)	(-1.94)	(0.24)
Education level	0.00	-0.02***	0.02***
	(0.40)	(-3.69)	(4.32)
Constant	1.83***	2.54***	2.88***
	(16.71)	(23.40)	(26.36)
Observations	4996	4982	4990

t-values in parentheses.

Standard errors are clustered at the neighbourhood (bloc) level.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 8. Conflict exposure and depression

OLS Regressions	(1)	(2)	(3)
Dependent variable:	Depression index	Trust in institutions	Trust in people
ACE	0.01	0.02*	0.03**
	(0.54)	(1.96)	(2.37)
TDE	0.13***	-0.13***	-0.10**
	(3.02)	(-3.68)	(2.29)
Depression index		-0.05*	-0.13***
		(1.94)	(6.37)
Age	-0.00	0.01**	0.01**
	(-1.19)	(2.20)	(2.47)
Ethnic minority	0.1*	-0.13*	0.03
	(1.78)	(-1.80)	(0.51)
Education level	0.01	-0.02***	0.03***
	(1.18)	(-3.54)	(4.54)
Constant	0.73***	2.50***	2.78***
	(5.95)	(23.23)	(24.88)
Observations	4974	4960	4969

t-values in parentheses.

Standard errors are clustered at the neighbourhood (bloc) level.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 9. Conflict exposure and in-group trust

Ordered logistic	(1)	(2)
Regressions	Family	Friends
Dependent variable:		
Trust in...		
ACE	0.02	0.07**
	(0.43)	(2.25)
TDE	0.26**	-0.11
	(2.27)	(-1.37)
Age	0.00	0.01
	(0.29)	(1.31)

Ethnic minority	0.09 (0.56)	-0.17 (-1.38)
Education level	-0.02 (1.23)	0.04*** (3.92)
Observations	4984	4989

z-values in parentheses.

Standard errors are clustered at the neighbourhood (bloc) level.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

5. Conclusion

This paper studies the effect of armed conflict exposure on trust in institutions and in people. To this end, we exploit a natural experiment that is created by the Turkish military institutions and the geography of the long-running civil conflict in the country. Based on data from a large-N survey conducted among Turkish army recruits living in regions unaffected by the conflict, we identify causal links between conflict exposure and trust, and we isolate these effects from other conflict-related changes in the socio-economic environment of a respondent. Our results suggest heterogeneous effects depending on the type of conflict exposure. While exposure to a more intense conflict environment increases trust levels, direct experiences of violent events in that environment reduce trust in a significant and substantive way. We document that the found effects are comparable for two different dimensions of trust, namely trust in institutions and trust in people.

Regarding the underlying mechanism, we argue that the found effects are best explained by fundamental transformations in a person's core set of beliefs about the benevolence and safety of the world. Following Janoff-Bulman's (1992) theory on how traumatizing experiences shatter one's positive outlook on life, we argue that directly experiencing traumatizing violence during a civil conflict is likely to lead to an erosion of a person's deeply rooted trust in the social world he is surrounded by. This is reflected by reduced levels of trust in a broad range of different dimensions of institutions, organizations, and social relations. We also provide corroborating evidence for this interpretation by showing that the experience of traumatizing violence is positively associated with indexes of depression and insecurity, which in turn negatively correlate with our trust measures. In contrast, surviving an armed conflict environment without a major mishap might provide a

signal that strengthens a person's beliefs about the safety and benevolence of the outside world even in the face of extreme danger.

Our study improves our understanding of the relationship between civil conflicts and social capital in several important ways. First, we provide carefully identified causal links between different types of conflict experiences and trust levels. Second, we disentangle the effects of these different types of exposure and document heterogeneous effects on trust assessments. Third, we provide evidence for a novel individual level psychological mechanism that has not been discussed in the empirical literature on conflict and trust so far. The results of this study thus bear important implications for researchers and policy advisers. First, they emphasize the need for a careful distinction between contextual and direct exposure in studies on conflicts and behavioral outcomes. Second, they provide important insights for the design of psychological and social recovery programs for combat veterans and, more generally, for victimized populations in post-conflict settings.

Importantly, our study might help explain the ambiguous findings in empirical studies on conflict exposure and trust. While a substantive body of literature points out that conflict exposure may have positive effects on prosocial behavior (Bauer et al., 2016), the underlying change in social preferences might still be driven by an erosion in fundamental trust perceptions as is documented by a number of studies on institutional and generalized trust (Grosjean, 2014; Conzo and Salustri, 2019). The proposed psychological mechanisms in our study imply that victimized individuals may adopt coping strategies aimed at re-creating the safe environment that was eroded by the traumatic conflict event. Thus, the increase in social participation and cooperation observed in existing studies likely arises from the search of a safe social space that provides a common identity and re-creates trust. In fact, tentative findings suggest that individuals with traumatic conflict experiences are more likely to participate in political organizations (results not shown). Related evidence by Kibris and Nelson (2021) also indicates that individuals with traumatic conflict experiences are more likely to engage in private economic activities and setup a business on their own (while being less successful in doing so). These results are in line with the notion that traumatized individuals seek to create an environment that is under their direct control, and that this type of coping strategy leads to an increase in pro-social engagement. In this sense, our findings support the notion of Grosjean (2014, p.426) that while exposure to conflict may

increase pro-social behavior, it is of a "dark nature" that is associated with the erosion of social and institutional trust, which ultimately undermines social cohesion and state capacity.

Finally, our results also speak to recent literature which suggests that the observed increase in pro-sociality in post-conflict settings only emerges among individuals of the same ethnic, political, or national identity. While Bauer et al. (2016) conclude that the observed effects on pro-social behavior most likely stem from a change in underlying social preferences, they attribute this change mostly to evolutionary explanations based on inter-group competition. In contrast, our results point to an alternative mechanism that relates to shattered world assumptions. Given that we do not find strong in-group biases, our results point to a more general transformation of underlying social preferences across social divisions. Yet, the positive effects we document for trust in family tentatively suggest that traumatized individuals, whose fundamental world views are shattered by their violent experiences, seek to re-create a safe social environment and in doing so, these individuals primarily rely on their closest social networks, i.e., their family. Although tentative, our analysis thus adds to the discussion by suggesting that violent conflict exposure fundamentally changes underlying trust dispositions of individuals, which might be channeled differently into pro-social behavior and trust perceptions depending on existing social, ethnic, or political divisions.

While being specific to the Turkish conflict setting and limited to ex-combatants, we believe that our results identify an important, yet understudied psychological mechanism that links conflict exposure to trust. However, it remains to be studied whether similar effects can be found for other countries and for different population cohorts, such as women or civilians, when exposed to internal armed conflicts. Also, our results are likely to provide conservative estimates on the effects of armed conflict exposure on trust as the respondents in our sample had been exposed to armed violence only for a pre-determined time period of 6 to 18 months, after which they were returned to their peaceful civilian lives. The fact that we find significant effects even within this limited temporal frame and for this specific cohort of respondents leads us to expect even stronger implications on trust levels for those millions of people who live in traumatizing conflict environments around the world for years without knowing when they can get out of it.

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Appendix

A.1 Survey Questions

The coding of variables included in the analyses and the respective survey questions are described below.

Number of combatant casualties in the district of service during the time of service (ACE):

Time and location are derived from the answers to:

When did you do your military service (start month, year – end month, year)?

Where were you assigned after your training (base district and town)?

Traumatic direct experiences (TDE):

Binary variable that is coded 1 if the answer to any of the two questions below is yes.

Were you ever injured in armed combat during your military service?

Was anyone around you ever injured or killed during in armed combat while you were on military service?

Age: Age of the respondent.

What is your age?

Height: Height of the respondent in centimeters.

How tall are you in centimeters?

Education level: Ordered categorical variable, increases from 1: “I have never been to school” to 16: “I have a doctorate degree”.

What is your education level?

1	Never been to school	10	Left university
2	Left primary school	11	Currently studying at a university
3	Completed primary school	12	A university graduate
4	Left secondary school	13	Left a graduate program
5	Graduated from secondary school	14	Currently a master’s student

6	Left high school	15	Hold a master's degree
7	Completed high school	16	Hold a doctoral degree
8	Left higher education	99	Not known/no answer
9	Completed higher education		

Minority: Ethnic background is a dummy variable that takes on the value 1 if the respondent mentioned any language other than Turkish when asked:

Which languages were spoken in your household when you were a child?

1	Turkish
2	Kurdish
3	Zaza
4	Arabic
5	Greek
6	Armenian
7	Syrian
90	Other
99	Don't know/ No answer

Kurdish ethnicity: Dummy variable that is coded 1 if Kurdish and/or Zaza was indicated in the above question on languages.

Institutional Trust: The average of the item scores in the following scale on institutional trust.

Using the 5-point scale below, please indicate how much you trust the following institutions.

Scale 1 to 5: 1 = "I don't trust them at all"; 2 = "I don't trust them much"; 3 = "I neither trust nor distrust them"; 4 = "I mostly trust them"; 5 = "I trust them completely"; 99 – Don't know/no answer

1. The army
2. Courts

3. Turkish Grand National Assembly
4. Tv channels
5. Newspapers
6. Political parties
7. Clergy
8. Universities
9. Environmental organizations
10. Charities
11. Police
12. Banks
13. Private firms
- 14. The EU**

Social Trust: We construct three variables for social trust, each using the item scores in the following scale on trust in (i) family, (ii), friends, and (iii) strangers, respectively.

Using the 5-point scale below, please indicate how much you trust people from the following groups.

Scale 1 to 5: 1 = "I don't trust them at all"; 2 = "I don't trust them much"; 3 = "I neither trust nor distrust them"; 4 = "I mostly trust them"; 5 = "I trust them completely"; 99 – Don't know/no answer

- i. Your family
- ii. Your friends
- iii. People you are not familiar with

Depression index: The average of the item scores in the following scale on depression.

This question is composed of 6 items designed to understand how you have been feeling in the last week. After carefully reading each item please indicate on the 5-point scale below how much you felt this way in the past week.

Scale 0 to 4: 0 = "None", 1 = "A little"; 2 = "Some"; 3 = "Quite a lot"; 4 = "A lot"; 98 - Don't understand; 99 – Don't know/no answer

1. Feeling lonely.
2. Feeling no interest in anything.
3. Feeling sad.
4. Feeling worthless.

5. Feeling hopeless
6. Having suicidal thoughts.

Insecurity index: The average of the item scores in the following scale on subjective insecurity.

Please indicate on the 5-point scale below how much you feel the following statements apply to the place that you live.

Scale 1 to 5: 1 = “Completely disagree”, 2 = “I somewhat disagree”; 3 = “I am undecided”; 4 = “I somewhat agree”; 5 = “I completely agree”; 98 - Don’t understand; 99 – Don’t know/no answer

1. I feel safe when I go out at night.
2. I think I might encounter life threatening situations where I live.
3. I am fearful for my life.
4. I think there are security risks associated with participating in political meetings.
5. I am fearful of being robbed during the day.
6. I am fearful of being robbed during the night.
7. I am fearful of encountering violence on the street in the day.
8. I am fearful of encountering violence on the street in the night.

A.2 Robustness

In this section, we present the additional analyses we conduct to test the robustness and validity of our results under alternative definitions of key variables, alternative model specifications, and in subsamples.

In Table A1, we present the results we obtain when we redefine TDE as a binary indicator of observing a fellow soldier get hurt or killed in armed clashes.

Table A1. Conflict exposure and trust, alternative TDE

OLS Regressions	(1)	(3)
Dependent variable:	Trust in institutions	Trust in people
ACE	0.02* (1.95)	0.03** (2.36)
TDE_alternative	-0.13*** (-3.70)	-0.11** (-2.41)

Age	0.05** (2.25)	0.01*** (2.62)
Ethnic minority	-0.15** (-2.01)	0.00 (0.07)
Education level	-0.02*** (-3.72)	0.02*** (4.20)
Constant	2.47*** (23.59)	2.69*** (24.35)
Observations	4983	4992

t-values in parentheses.

Standard errors are clustered at the neighbourhood (bloc) level.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

To demonstrate that the educational differentiation of college graduate draftees in terms of rank and duration does not bias our results in any way, we present in Table A2 the results we obtain when we restrict our sample to less than college educated respondents.

Table A2. Conflict exposure and trust, college graduates excluded

OLS Regressions	(1)	(2)
Dependent variable:	Trust in institutions	Trust in people
ACE	0.02** (2.13)	0.03*** (2.66)
TDE	-0.14*** (-3.59)	-0.11** (-2.52)
Age	0.00* (1.71)	0.00** (2.15)
Ethnic minority	-0.16** (-2.12)	-0.00 (0.00)
Education level	-0.03*** (-4.07)	0.01* (1.75)
Constant	2.56*** (22.50)	2.78*** (23.69)
Observations	4522	4528

t-values in parentheses.

Standard errors are clustered at the neighbourhood (bloc) level.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Tables A3 – A5 report the results under alternative model specifications. As can be seen, our results remain robust under a TOBIT specification that acknowledges the censored nature of our dependent variables; and under fixed effects specifications that control for fixed effects at the base location level.

Table A3. Conflict exposure and trust, TOBIT specification

Tobit Regressions	(1)	(2)
Dependent variable:	Trust in institutions	Trust in people
ACE	0.02** (2.01)	0.03** (2.52)

TDE	-0.14*** (-3.79)	-0.12*** (-2.66)
Age	0.00** (2.21)	0.01** (2.53)
Ethnic minority	-0.15* (-1.95)	0.00 (0.01)
Education level	-0.02*** (-3.69)	0.03*** (4.20)
Constant	2.46*** (22.65)	2.66*** (22.73)
Observations	4983	4991

t-values in parentheses.

Standard errors are clustered at the neighbourhood (bloc) level.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4. Conflict exposure and trust, fixed effect for base location in the conflict zone

OLS Regressions	(1)	(2)
Dependent variable:	Trust in institutions	Trust in people
ACE	0.02** (2.08)	0.03** (2.40)
TDE	-0.13*** (-3.68)	-0.11** (-2.54)
Base in the conflict zone	-0.01 (-0.19)	0.00 (0.00)
Age	0.00** (2.24)	0.01*** (2.65)
Ethnic minority	-0.14** (-2.00)	0.01 (0.09)
Education level	-0.02*** (-3.73)	0.02*** (4.20)
Constant	2.47*** (23.57)	2.69*** (24.58)
Observations	4983	4991

Base in the conflict zone is 1 if respondent was assigned to a military base in a district with more than 50 combatant casualties over the course of the conflict.

t-values in parentheses.

Standard errors are clustered at the neighbourhood (bloc) level.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A5. Conflict exposure and trust, fixed effects for base districts

OLS Regressions	(1)	(2)
Dependent variable:	Trust in institutions	Trust in people
ACE	0.02** (2.32)	0.03** (2.07)

TDE	-0.13*** (-3.58)	-0.11** (-2.42)
Age	0.01*** (2.63)	0.01*** (2.72)
Ethnic minority	-0.15** (-2.17)	0.00 (0.06)
Education level	-0.02*** (-3.81)	0.02*** (4.24)
Constant	2.57*** (16.27)	2.50*** (13.21)

Base district fixed effects included but not reported.

Observations	4983	4991
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t-values in parentheses.

Standard errors are clustered at the neighbourhood (bloc) level.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Finally, Table A6 presents the results for the individual items included in our institutional trust measure.

Ordered Logistic Regressions Dependent variable: Trust in ...	(1) The army	(2) Courts	(3) The parliament	(4) TV channels	(5) Newspapers	(6) Political parties	(7) The clergy	(8) Universities	(9) Environmental organizations	(10) Charities	(11) The police	(12) Banks	(13) Private companies	(14) The EU
ACE	-0.02 (-0.79)	0.06** (2.20)	0.04* (1.93)	0.02 (0.83)	0.02 (0.68)	0.04 (1.56)	0.03 (1.59)	-0.02 (0.86)	0.05** (2.03)	0.07*** (2.88)	-0.01 (-0.36)	0.05*** (2.81)	0.03 (1.22)	0.07*** (2.93)
TDE	0.11 (1.16)	-0.27*** (-3.27)	-0.22*** (-2.89)	-0.34*** (-4.02)	-0.34*** (-4.03)	-0.31*** (-3.61)	-0.21*** (-2.59)	-0.06 (-0.80)	-0.28*** (-3.03)	-0.23*** (-2.60)	-0.01 (-0.12)	-0.23*** (-2.88)	-0.25*** (-3.00)	-0.39*** (-4.30)
Age	-0.00 (-0.11)	-0.01 (-0.97)	0.00 (0.80)	0.01 (1.21)	0.01 (1.60)	0.01* (1.77)	0.01** (2.40)	0.02*** (3.69)	0.01** (2.37)	0.01 (1.43)	-0.00 (-0.29)	0.01** (2.35)	0.01 (1.08)	0.01 (1.56)
Ethnic minority	-0.29** (-2.14)	-0.52*** (-3.42)	-0.33** (-2.22)	-0.33*** (-2.60)	-0.32** (-2.31)	-0.33*** (-2.68)	-0.42*** (-3.37)	-0.06 (-0.41)	-0.22 (-1.51)	-0.40*** (-2.79)	-0.36*** (-2.57)	-0.32** (2.19)	-0.18 (-1.22)	-0.03 (-0.16)
Education level	-0.08*** (-6.61)	-0.06*** (-6.06)	-0.05*** (-4.61)	0.03*** (2.84)	-0.02 (-1.26)	-0.02 (-1.16)	-0.05*** (-4.16)	-0.02 (-1.37)	0.01 (0.98)	-0.03** (2.53)	-0.08*** (-7.04)	-0.01 (-0.56)	0.03** (2.18)	0.05*** (3.99)
Observations	4957	4947	4961	4971	4970	4956	4963	4932	4942	4949	4961	4963	4954	4936

z-values in parentheses.

Standard errors are clustered at the neighbourhood (bloc) level.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A6. Conflict exposure and institutional trust, individual items