Legacies of Wartime Sexual Violence: Evidence from World War II "Comfort Stations"

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Abstract

What are the long-term effects of wartime sexual violence on trust? We argue that whereas sexual violence reinforces perceptions of state absence, it compels affected communities to turn to kinship and social bonds for communal coping, building social trust over time. We provide evidence from original geocoded data of over 4,000 "comfort stations" across Asia—the Japanese Imperial Army's institution of sexual slavery during World War II. Our cross-national and sub-national tests get analytical leverage from prewar railroad networks as a treatment assignment mechanism and the rarity of postwar repatriation of "comfort women." Proximity to historical "comfort stations" sites consistently predicts a higher likelihood of social trust today, but not political trust. We document causal mechanisms through historical oral testimonies. Some consequences of wartime sexual violence may follow a distinct logic from broader conflict, as communities rely on social ties to survive the stigmatized trauma of rape.

1 Introduction

What are the long-term consequences of wartime sexual violence for trust? An extensive literature examines how exposure to state violence shapes a wide range of political attitudes and behavior (Bellows and Miguel, 2009; Gilligan, Pasquale and Samii, 2014; Grosjean, 2014), and how these effects persist across generations (Balcells, 2012; Lupu and Peisakhin, 2017; Rozenas, Schutte and Zhukov, 2017; Wang, 2021). However, the legacies of wartime sexual violence remain much less understood despite its commonality in war (Cohen and Nordås, 2014); indeed, over a third of contemporary armed conflicts are estimated to involve sexual slavery (Smith, Datta and Bales, 2023). While recent policy discourse in international organizations and jurisprudence naming sexual violence as "a weapon of war" has raised its public visibility,[1] few theories address its wider impact on community-level attitudes and behaviors over time.

There are compelling reasons to consider the legacies of wartime *sexual* violence more systematically. Unlike general violence against civilian populations that follows a strategic logic (Hoover Green, 2016; Humphreys and Weinstein, 2006), wartime rape is performative (Cohen, 2013; Wood, 2018), rooted in patriarchal culture (Enloe, 2000), and generates special moral outrage that persists after war (Viterna, 2014). Survivors and their families also experience significant social stigmatization due to sexual taboos (Koos and Lindsey, 2022). These accounts provide theoretical grounds to believe that this form of wartime violence shapes social and political preferences beyond the war generation, potentially in distinct ways from exposure to more general forms of political violence.

We argue that historical exposure to wartime sexual violence has diverging effects on social and political trust today. On the one hand, sexual violence turns public opinion against the state for its failure to protect women, thereby reinforcing perceptions of the absence of state protection and lack of safety for the vulnerable population over time (Kreft, 2019). On the other hand, exposure to wartime sexual violence can increase social trust: It forces affected

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[1]See e.g., International Criminal Court (2014); United Nations (2023)

communities to turn to kinship and social bonds as a "communal coping" mechanism (Gilligan, Pasquale and Samii, 2014), increasing community level social trust in the long run. Given the absence of institutionalized channels to address grievances over rape, combined with the social stigma of victimization, social networks are one of the few if not only coping strategies available to women and the affected communities. These pro-social attitudes developed in response to wartime sexual violence are transmitted over multiple generations through family and peers.

To test our argument, we turn to the case of "comfort women" (*ianfu*, 慰安婦)—the Japanese euphemism used for women forced into sexual slavery by the Japanese Imperial Army during World War II (WWII).[2] We use the geographical sites of WWII-era "comfort stations" (*ianjo*, 慰安所), where the women were enslaved, to capture community-level exposure to institutionalized wartime sexual violence. We collected original geocoded data of over 4,000 "comfort stations" across 24 states in Asia, based on Japanese government archival records, soldiers' recollections, witness and survivor testimonies, and secondary sources. This is, to our knowledge, the most comprehensive data to date on WWII-era "comfort stations."

Our research design has a three-pronged approach. First, using 2018 cross-national survey data from Asian Barometer, we establish a regionally consistent pattern in the relationship between proximity to a historical "comfort station" site and contemporary individual-level social and political trust. We then replicate the analysis sub-nationally in China—the state with the highest share of "comfort stations" in our data—using the China Survey (Wang, 2021). The second analysis leverages within-state variation in war casualties and prewar Japanese colonial presence, among other attributes, to rule out competing explanations. Lastly, we conduct in-depth readings of historical oral testimonies of "comfort women" survivors and Japanese soldier witnesses to document underlying causal mechanisms.

Our empirical strategy leverages the fact that "comfort women" settled near the "comfort stations" when war ended, which mitigates potential selection bias arising from postwar sort-

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[2]The term "comfort women" can make a false impression that these women were voluntary participants, which is untrue (Soh, 2008; Tanaka, 2002). We use the term as is to denote the official *jūgun ianfu* (military comfort women) system of the Japanese Imperial Army.

ing. We also rely on novel georeferenced data of pre-existing railroad networks of the South Manchuria Railway Company.[3] Tied to the Imperial Army, this public infrastructure in Northeast China played an outsized role in the transportation of military supplies and people (Mantetsu Kai and Harada, 2007; Matsusaka, 2001), including "comfort women." We control for this prewar treatment assignment mechanism in cross-national and sub-national analyses, following the identification strategy of recent studies that estimate the long-term effects of historical events (e.g., Harada, Ito and Smith, forthcoming).

We show that proximity to "comfort stations" predicts a significantly higher likelihood of current social trust in family, relatives, and the local community. In contrast, proximity to these sites has either a negative or null relationship with trust in government. The findings are robust to controlling for general war casualties, military operations conducted by Japan and other external powers, prewar colonial occupation, and a battery of demographic and geographic attributes. The qualitative evidence is consistent with the theorized mechanism. While the narratives of survivors, their families, and witnesses are by no means monolithic, in-group bonds and reliance on community ties are recurring themes. The intergenerational transmission of stories and preferences seem to occur first through the household, in line with how narratives of major political events circulate through families (Balcells, 2012; Wang, 2021).

The findings contribute to several research streams. First, we weigh in on an extensive debate in conflict scholarship on whether and why war leads to pro-social behaviors and political engagement (Barceló, 2021; Berman, Clarke and Majed, 2024; Blattman, 2009; Wood, 2008). Our results are consistent with previous findings of increased pro-social behavior through in-group altruism (Bauer et al., 2016), where moving away or institutional mechanisms to redress the harm are foreclosed for most survivors. Social community-level trust is as an antidote, if imperfect, to surviving violent realities, but it may be particularly pronounced for this form of violence due to its stigmatized nature (Koos, 2018).

Second, we contribute new theory and evidence to a growing literature on wartime sex-

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[3]Minami Manshū Tetsudō Kabushikigaisha, or Mantetsu for short.

ual violence, which has traditionally focused on identifying its causes and explaining variation in its patterns (Cohen, 2013; Wood, 2006). We advance the scholarship by demonstrating the downstream consequences of this variation. Although we focus on the historical case of Japan, similar state-led sexual violence features in contemporary armed conflicts, from military sex camps during Guatemala's civil war (UN Women, 2018) to institutionalized military prostitution for the US military in South Korea (Moon, 1997).

Third, our findings speak to a longstanding scholarship on the sources of political and social trust. Though important in their own right, trusting beliefs affect a wide range of outcomes such as economic development, political participation, and good governance.[4] Compared to those for social trust, our results for political trust were more inconsistent, potentially indicating its greater sensitivity to short- and medium-term political events. More broadly, our study joins recent historical political economy studies that trace the historical roots of various contemporary phenomena, such as the quality of political institutions (e.g., Lankina and Getachew, 2012; Zhukov and Talibova, 2018) and economic performance (e.g., Charnysh, 2015; Mattingly, 2017). The "comfort women" issue remains a flashpoint in contemporary East and Southeast Asian relations. Our study sheds light on one way in which this past harm lingers into the present, which has potential implications for historical reckoning.

2   The Legacies of War and State Violence

A large body of scholarship investigates how exposure to wartime violence—and political violence more generally—affects social and political attitudes and engagement. One strand of this research finds that violence may reduce political and institutional trust, especially in ethnically or culturally heterogeneous societies. In their study of the Nepalese civil war, Juan and Pierskalla (2016) find that individuals in villages with greater civil war casualties were significantly less trusting of political authorities. Other studies find that civil war violence depresses trusting

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[4]For discussions, see e.g., Levi and Stoker (2000); Zmerli and Van der Meer (2017).

beliefs in other members of the community (Cassar, Grosjean and Whitt, 2013) by increasing the salience of ethnic difference (Rohner, Thoenig and Zilibotti, 2013).

A second strand of this research suggests that people who directly experienced war violence have higher levels of both civic and political engagement relative to non-victims. Bellows and Miguel (2006, 2009) find in Sierra Leone that individuals whose households bore intense war violence were more likely to join social and political groups and attend community meetings. Similarly, in Uganda, former child soldiers of the Lord's Resistance Army were more likely to become community leaders and vote in adulthood (Blattman, 2009). More recent work suggests potential causal mechanisms behind such findings. Members of a community come together to face an existential threat in a form of communal coping (Berman, Clarke and Majed, 2024; Gilligan, Pasquale and Samii, 2014), making individuals more trusting of one another. Wartime violence may encourage pro-social behaviors in part by intensifying "parochial" or in-group altruism (Bauer et al., 2016; Voors et al., 2012), though potentially at the cost of increasing out-group intolerance (Homola, Pereira and Tavits, 2020). It even has a gendered effect, increasing women's bargaining power and further leading them to prefer state laws over alternative legal mechanisms (Lazarev, 2019).

Notably, initial shocks to social and political preferences and attitudes can persist over time. Experience of war may indirectly affect policy preferences decades later (Homola, Pereira and Tavits, 2020). But the effects are not necessarily limited to those who directly experienced violence. War trauma can affect emotions and behavior of wider communities (Voors et al., 2012) as well as new generational cohorts. For example, in her seminal work on how grievances related to wartime violations shaped Spanish political identities over time, Balcells (2012) documents how the memories of especially severe violence are transmitted through generations. Grievances are deep-seated: Individuals who grew up hearing of violence against their relatives today reject the political identity represented by the armed group. In Bosnia, Lupu and Peisakhin (2017) find that exposure to war violence produces hardliner political attitudes in

subsequent generations. Scholars have documented the enduring influence of state violence on identities and attitudes in various historical and geographic contexts. These range from the exposure to Nazi violence (Charnysh and Finkel, 2017; Homola, Pereira and Tavits, 2020) and Stalin's reign of terror (Rozenas, Schutte and Zhukov, 2017; Zhukov and Talibova, 2018), to political violence during the Chinese Cultural Revolution (Wang, 2021) and the Iraqi 2003 civil war (Berman, Clarke and Majed, 2024).

Yet, this literature has remained disconnected from the growing literature on wartime sexual violence, despite the empirical regularity with which it occurs during armed conflict (Cohen, 2013; Cohen and Nordås, 2014; Smith, Datta and Bales, 2023). There are at least three reasons to focus on the attitudinal legacies of this specific form of conflict-related violence in its own right. First, extensive work demonstrates the pernicious effects of wartime sexual violence on victim health and social and economic wellbeing.[5] It also increases the rate of intimate-partner violence by making victim blaming more acceptable (Østby, Leiby and Nordås, 2019). The enormity of the trauma makes it likely that the wartime sexual violence has much longer legacies than typically considered in existing studies.

Second, the social and political consequences may follow a different logic from those of broader political violence. Although wartime sexual violence is, by definition, linked to war, this form of violence often has symbolic, social, and performative functions (Cohen, 2013; Wood, 2018). These features set it apart from other conflict-related violence against civilian populations, which instead follow a largely instrumental or strategic logic (Humphreys and Weinstein, 2006). Differences in how conflict-related violence emerges as a practice may dictate different responses among those exposed to the violence (Koos, 2017).

Third, victims of wartime sexual violence and their families experience substantial stigmatization (Koos and Lindsey, 2022; Traunmüller, Kijewski and Freitag, 2019) in distinct ways from victimization in war more generally. For example, competitive victimhood, in which different parties to a conflict compete over the moral claim of which group suffered more, is

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[5]For a recent review, see Nordås and Cohen (2021)

a common phenomenon after violent conflict (Noor et al., 2012); yet, rarely does such competition emerge over who suffered greater *sexual* violence. This stigmatization can be more pronounced due to the sensitive nature of sexual violence and the social taboos surrounding it (Page and Whitt, 2020). The production of violence is embedded in patriarchal values that make it difficult for survivors to gain public recognition, support, and agency (Burt, 1980; Enloe, 2000). Stigmatization may both affect, and be aggravated by, the relative lack of institutional channels to address grievances (Boesten, 2014), compared to avenues to address other forms of violence.[6]

Although much work sheds light on the deleterious effects of wartime sexual violence, the focus has been on the short term.[7] One reason for the relative neglect of long-term attitudinal legacies is the inherent challenge of observing this specific violence in the first place. Chronic under-reporting makes valid inference about impact difficult (Nordås and Cohen, 2021; Traunmüller, Kijewski and Freitag, 2019), much less track them over long stretches of time.[8] Data constraints have hindered rigorous theory-building about how sexual violence during conflict could affect community-level attitudes beyond its direct victims or wartime generation. We bridge insights from existing scholarship to develop a unified theory of how wartime sexual violence shapes political and social trust in the long run.

3 How Wartime Sexual Violence Affects Long-term Trust

We begin with the premise that wartime trauma, in general, is not experienced in social isolation (Barceló, 2021; Walden and Zhukov, 2020). Wartime sexual violence, a decidedly traumatic

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[6]For example, sexual violence was seldom addressed in historical war crimes tribunals including the postwar Far East Tribunal and the later ad hoc International Criminal Tribunals for the former Yugoslavia (ICTY) and Rwanda (ICTR). The growing recognition in international criminal jurisprudence is a recent phenomenon.

[7]Koos (2018) examines a medium-term effect, spanning roughly a decade, of conflict-related sexual violence in Sierra Leone on pro-social behavior among victims and their families. See also Koos and Traunmüller (2022) and González and Traunmüller (2023).

[8]Methods such as interviews and surveys with survivors of sexual violence also pose ethical concerns about the risk of re-traumatization. Recent research finds list experiments as an alternative strategy. See Koos and Traunmüller (2022); Traunmüller, Kijewski and Freitag (2019).

event, has a potential community-wide impact not only on directly affected individuals, but also attitudes among the broader community and future generations.

We argue that this form of violence has disparate effects on political and social trust. On the one hand, we expect sexual violence during conflict to undermine trust in state institutions. A state is expected by constituents to provide *masculine* protection to women from violence by outsiders (Sjoberg, 2013). Pervasive sexual violence committed by outsiders exposes the state's breach of this promise (Kreft, 2019; Nagel, 2019) and its failure to stop "the selfish aggressor who wishes to invade the lord's property and sexually conquer his women" (Young, 2003, 4). Whereas perceptions of government responsiveness are central to political trust (Wong, 2016), the inadequacy of the state's protection of women instead reinforces notions of state absence and indifference towards individuals, depleting political trust over time. In line with this logic, Koos and Traunmüller (2022) find that survivors of wartime sexual violence harbored stronger distrust toward political institutions in the Democratic Republic of Congo, compared to those in Liberia, where justice efforts provided a modicum of state protection.

On the other hand, wartime sexual violence could increase social trust in the affected community by compelling communities to rely on kinship and social networks as a coping mechanism. In the absence of formal institutional avenues to address grievances over wartime sexual violence, these networks become the primary, if not only, sources of support for survivors and the broader affected community. Scholarship on interpersonal violence and sexual abuse finds that families critically support survivors' resilience (Clark et al., 2022) by serving as "a sanctuary of safety and protection for its members and an area of pain and destruction that parallels the horrors of the larger society" (Nelson, 2003, 312). Extended kinship, such as relatives, friends, and community members, also provide resilience resources (Vermeulen and Greeff, 2015).

Even if formal channels to report wartime rape exist, skepticism towards the state and the stigmatized nature of rape victimization jointly discourage public communication and narratives about rape trauma (Kelly, 1988, 191), especially during the chaos of conflict when survival

is at stake (Traunmüller, Kijewski and Freitag, 2019). Kinship and local social ties fill this gap. For example, sociology scholarship on "whisper networks"—informal communication channels used by women to alert others about instances of sexual abuse or assault—suggest that informal alliances develop in response to pervasive sexual and gender-based violence (Gajjala, 2018). These networks serve as a protective mechanism in environments where sexual assault is not adequately addressed, offering survivors a means to share their experiences out of the public eye. Female survivors report increased trust when they share their stories with other women (Kelly, 1988).

Reconnecting through community-based activities could help the exposed community reduce trauma and depression (Bryant-Davis et al., 2011), but it could also be a new source of belonging and trusting beliefs when formal organizations or state institutions are lacking. In Koos's (2018) study of Sierra Leone, survivors and their families engaged in highly pro-social behaviors, such as community cleansing rituals, to recover a sense of belonging that sexual violence had destroyed. The community, sharing an experience of extreme level of violence, builds a greater sense of belonging and trust among its members, especially when the violence is inflicted by outsiders (Berman, Clarke and Majed, 2024).

Further, as discussed earlier, social preferences constructed by violence are sticky. Once they take root, they diffuse beyond the directly impacted individuals and generational cohort. We expect social trust to do the same in our case. Pro-social attitudes and behaviors, initially developed as a survival mechanism in response to wartime sexual violence, accrue in the community over time as they are transmitted through survivors, witnesses, and subsequent generations. More specifically, awareness of violence, vulnerability, and strategies for future protection are transmitted by mothers to their children, particularly daughters (Kelly, 1988, 199).

This discussion yields two relatively clear observable implications. We expect exposure to historical wartime sexual violence to lead to greater contemporary social trust, especially among kinship networks and local communities. By contrast, our framework predicts decreased po-
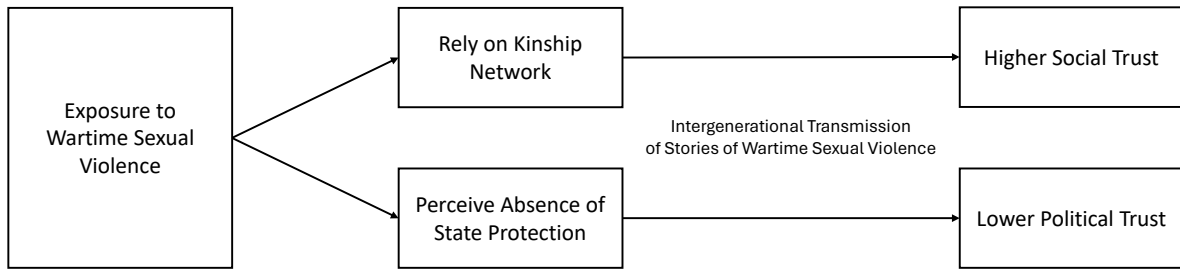
Figure 1: Transmission of social and political trust in response to wartime sexual violence

litical trust in state authorities. Figure 1 summarizes the causal logic.

4   Background to WWII "Comfort Stations"

We test our argument in the case of institutionalized sexual slavery used by the Japanese Imperial Army during WWII: "Comfort stations". We provide a brief historical background before turning to the research design. The earliest *ianjo*, or "comfort stations," for the exclusive use of troops and officers were established around 1932 in Shanghai, China (Tanaka, 2002; Yoshimi, 1992).[9] The *ianjo* system was systematically adopted as a general policy by the Army after Japan launched full-scale war against China in 1937 and became fully institutionalized by late 1938.

The *ianjo* policy served multiple purposes. The Japanese authorities intended the institution to reduce rape and sexual abuse by their soldiers,[10] better control the spread of sexually transmitted diseases,[11] provide "leisure to compensate for …unlimited tours of duty" (Tanaka, 2002, 14) and maintain loyalty among the ranks (Min, 2021). Commanders were further concerned about local women divulging military secrets and entering the military bases as spies (Hirofumi, 1998). When the initial recruitment of Japanese sex workers fell short, the army began the forcible recruitment of Korean, Chinese, and Southeast Asian women. Most were ab-

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[9]Pre-existing Japanese brothels were privately operated for Japanese residents and visitors, and not exclusive to military use (Yoshimi, 1992, 183–185).

[10]Many comfort stations opened after the mass rape of Chinese women during the Nanjing Massacre (Chang, 2014; Tanaka, 2002). However, more "comfort stations" did not reduce the incidence of rape; rather, Min (2021, 71) observes, they institutionalized it in "a system of officially recognized sexual violence that victimized particular women and trampled upon their human rights."

[11]Comfort women in these stations were regularly checked with medical examination for STD infections.

ducted, forcibly taken away, or tricked into joining (Soh, 2008; Yoshimi, 1992). By March 1938, a growing number of Korean and Japanese women were sent to "comfort stations" in China (Tanaka, 2002), with the language barrier ostensibly safeguarding military secrets. Once in the station, women would be routinely raped by soldiers, numbering from five to thirty-five in a single day (International Commission of Jurists, 1994, 89). The women were seldom compensated and constantly guarded by the army, making escape nearly impossible (Henson, 2017; Qiu, Zhiliang and Lifei, 2014).

"Comfort stations" have been geographically located widely across Asia. Sites include East Asian countries like the Korean peninsula and China—targets of early imperial conquest—but also various Southeast Asian countries, notably Indonesia and the Philippines. Estimates of the number of "comfort women" vary widely, between 80,000 and 200,000 (Min, Chung and Yim, 2020; Yoshimi, 2000, 91–94). The size of comfort stations varied; some were temporary setups attached to small battalions,[12] but historians agree that most were formally institutionalized with a quasi-permanent presence.[13]

This case is well suited to test our theory, for theoretical and empirical reasons. Theoretically, it is a clear case of institutionalized wartime sexual violence carried out by the enemy (here, Japan), which we expect turns local community attitudes against the state authority as having failed to protect women, while simultaneously fostering social ties. Further, the "comfort women" issue has been culturally taboo in Asia for a long time.

Empirically, survivors typically *stayed in the place they were abducted to*, which allows us to evaluate the community- and intergenerational transmission mechanism. Following the war's conclusion in August 1945, many "comfort women" voluntarily or involuntarily settled near the "comfort stations" they worked in and joined the local community. As the empire withdrew,

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[12]When Japanese military units moved to other locations as the war developed, these smaller stations and women in them were taken together (Min, 2021; Tanaka, 2002).

[13]There appear to be three broad categories of management: (a) directly managed by the military personnel, (b) managed by civilian local middle men but supervised by military personnel, or (c) existing facilities designated for the special use (Min, 2021; Soh, 2008; Yoshimi, 2000).

the Japanese abandoned the women, who had to find their own means to travel home (Tanaka, 2002). Few had such resources: the women were barely paid, if at all, in the station (Qiu, Zhiliang and Lifei, 2014). Others stayed out to fear of social stigma upon repatriation. Former "comfort women" felt deep shame due to socially constructed stigmas against "prostitutes" and feared that "their families would not accept them" (Blackburn, 2022, 110). These survivors decided to resettle in the foreign land as "second-class citizens" (Tanaka, 2002, 59), often marrying local men to restore their value after having been 'tainted' by their experience.

"Comfort women" of varying pre-exsiting pro-social dispositions, risk aversity, family background, ethnicity, and other unobserved individual-level attributes in large part stayed put. The rarity of repatriation mitigates potential selection bias that arises from postwar sorting or the flight of social capital from violence-affected communities. The widespread practice of surviving "comfort women" marrying into local communities helps to test community-level transmission.

5   Research Design and Data

We test the legacy effect of WWII-era "comfort stations" on contemporary social and political trust at three different levels. First, we analyze a cross-national sample to examine the relationship between proximity to historical "comfort station" sites and social and political trust today using the 2018 Asia Barometer surveys in 23 countries (excluding Japan). Then we conduct a sub-national analysis in China, which allows a series of more fine-grained robustness checks. Lastly, we use individual-level historical oral testimonies to illustrate perceptions of state absence and reliance on kinship ties as a coping mechanism in affected communities.

5.1 "Comfort Stations" Data

We constructed an original geocoded dataset of "comfort stations" across Asia, utilizing various primary and secondary sources that document survivors and witness testimonies and Japanese archival documents. These testimonies and archival documents contain information that allow us to identify location of each station.

Using location information provided by these sources, we matched stations to present-day geo-locations through the following steps. First, we extracted information on five administrative levels: village, district, city, province, and country.[14] Second, we used publicly available geospatial administrative shapefiles for each country to match names of these administrative units. For those that failed to match using names provided due to misspelled pinyin or changed names, we took extra steps to locate the station using Google Earth.[15] Out of the original 4,311 distinctive comfort stations we identified, we were able to match the locations of 4,002 stations. Figure 2 maps out these comfort stations across Asia. Table 1 reports the count of "comfort stations" across the twenty-four countries in the dataset.

Table 1: Count of "Comfort Stations"

Brunei	3	Northern Mariana Isl.	17
Cambodia	9	Palau	32
China	1,771	Papua New Guinea	95
East Timor	52	Philippines	323
India	25	Russia	12
Indonesia	588	Singapore	17
Japan	388	Solomon Island	1
Laos	1	South Korea	10
Malaysia	128	Taiwan	51
Micronesia	78	Thailand	23
Myanmar	308	Vietnam	30
North Korea	17	Guam	23

Our dataset is not immune to potential missing information and under-reporting bias,

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[14]While location information provided by these testimonies are mostly at the district level, some have precision up to neighborhood and village levels.

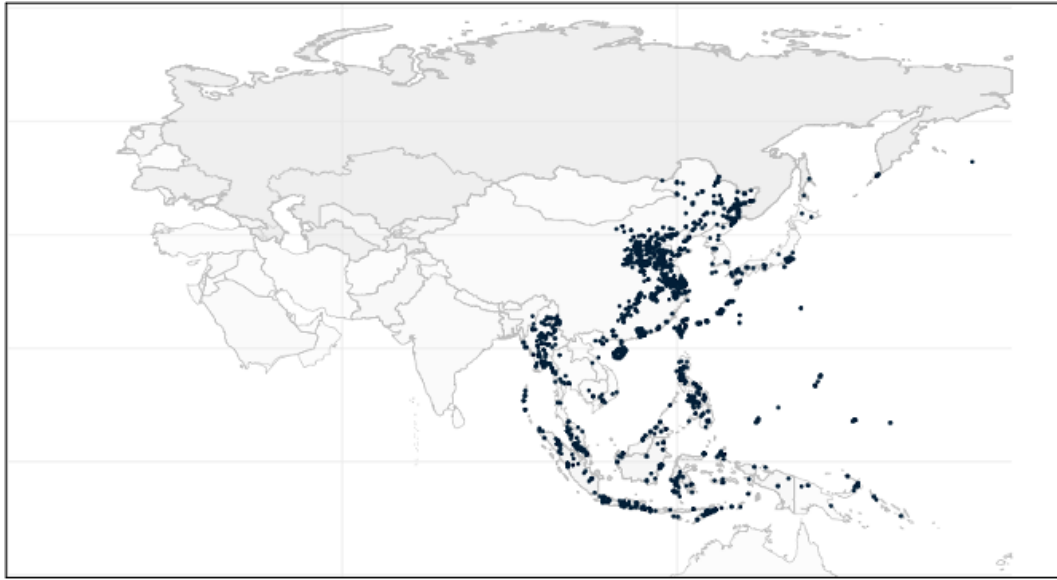[15]Appendix A provides the detailed steps we took in collecting the data.

Figure 2: Location of Comfort Stations

a common challenge in data collection on wartime sexual violence (Davies and True, 2017; Hoover Green and Cohen, 2021). For example, after its defeat, the Japanese Imperial Army destroyed documents that could attest to the human rights abuses they committed; nonetheless, "comfort women" and documentation of *ianjo* appear in remaining official Japanese documents "as just one more type of war material, whose supply and transport had to be attended to" (Yoshimi, 2000, 13). Further, some survivors may have continued to face obstacles to reporting the abuse even after the issue became public in the 1990's, which could under-represent the scale of institutionalized sexual violence. Our solution is to construct our "comfort station" data from multiple sources, which make it by far the best approximation of the historical violence that occurred more than half a century ago. Our sources include those that are plausibly less affected by the under-reporting issue, such as government and military archival records and testimonies by former soldiers and foreign witnesses. Victim testimonies make up 15% of the sources used to construct our data, as shown in Table 2.

Table 2: Source Types Used to Construct Georeferenced Data

Source Type	Frequency	Proportion
Public government or military records	1019	0.24
Soldier memoir	1883	0.44
Victim testimony	667	0.15
Third Party witness testimony	410	0.10
Other	332	0.08

5.2 Empirical Strategy

Figure 3 shows the causal relationship we aim to establish (*Proposed Mechanism*) and two alternative mechanisms that can confound our findings. First, social and political trust today may be driven by "comfort stations" but also general violence against civilians during WWII (*Alternative Mechanism A* of Figure 3). While locations of "comfort stations" do not overlap perfectly with wartime violence against civilians, both types of violence occur in areas with Japanese Imperial Army presence. In some cases like the Nanjing Massacre, the 1937 mass killing of some 200,000 Chinese civilians by the Japanese army, "comfort stations" may have been stationed in the same communities that saw extreme levels of violence against civilians (Chang, 2014).

To tackle this issue, in the sub-national analysis of China, we conduct an additional placebo test that uses province-level data on civilian casualties during the Sino-Japanese War. We use the ratio of civilian casualties to the region's pre-war population in 1936, provided by Che et al. (2015).[16] Casualties data are a proxy for the degree of community exposure to fatal violence by the Japanese Imperial Army, which help to disentangle the effects of "comfort stations" from broader wartime violence.

A more serious challenge to causal inference stems from the non-randomness of community assignment to wartime sexual violence. For example, pre-existing political attitudes and preferences could have conditioned the probability of exposure to political violence in the past,

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[16]The casualty data, originally from Chi (1987), does not report casualties of three Manchuria regions (Heilongjiang, Jilin and Liaoning) that had been occupied by the Japanese before the outbreak of the Sino-Japanese War in 1937. We conduct a separate analysis of these three Manchuria regions, which had less violence or confrontations compared to the rest of China (Che et al., 2015).
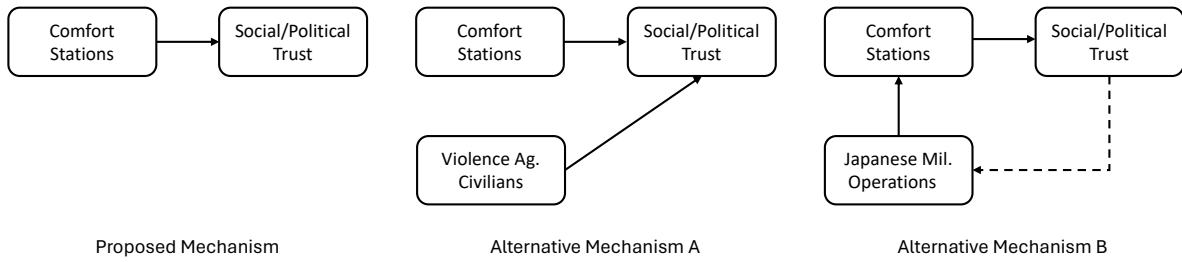
Figure 3: The Proposed Causal Mechanism and Alternative Mechanisms

making exposure to "comfort stations" endogenous to attitudinal outcomes today (*Alternative Mechanism B* of Figure 3). Locations of "comfort stations" were decided by the Japanese Imperial Army during the Sino-Japanese War. However, there is no historical evidence suggesting that the Japanese military installed the sexual slavery institution according to the pre-war social and political trust of the community. Rather, we argue that the locations were dictated by factors unrelated to social and political trust, namely by logistical and infrastructure constraints on where these women could be transported and kept.

Previous scholarship has adopted various methods to address the issue of non-random assignment treatment such as instrumental variables (Wang, 2021; Zhukov and Talibova, 2018), regression discontinuity (Grasse, 2024; Mattingly, 2017; Rozenas, Schutte and Zhukov, 2017), and difference-in-differences design (Fouka and Voth, 2023). In this paper, we follow Harada, Ito and Smith (forthcoming) and control for all known treatment assignment mechanisms that are major potential confounders. Historical scholarship suggests two primary factors that shaped the Imperial Army's decisions on installing "comfort stations." First, these stations, meant for the exclusive use by troops, needed to be readily accessible to active battalions. Second, "comfort stations" were located near train stations and railways that predate the Sino-Japanese War. Railways are where the Japanese military campaigns mainly targeted and, hence, predict the location of "comfort stations." Many key military operations during the war were undertaken near railways, which provided a supply line for battling troops.[17]

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[17]For instance, the Ichigo Offensive, the largest military operation carried out by the Japanese military, was undertaken along the Peking-Hankou, Hankou-Guangzhou, and Hunan-Guangxi railways between 1944 and 1945

Railways were also the primary means the Japanese military used for wartime communication and the transport of military supplies (Mantetsu Kai and Harada, 2007; Matsusaka, 2001). The field armies were told to operate within a 150-180 miles radius of a railhead for reliable communication as they could not be resupplied otherwise (Drea, 2016). Many women, as a *supply* to the "comfort station", were transported across Asia via trains. For example, Bok-sil Yeo was abducted by Japanese police officers and soldiers from her home in South Korea; she found herself in dark cargo cars with fourteen other women on a train bound to Tianjin, China (Min, 2021, 103). Numerous testimonies of survivors describe being transported by a freight car of a train.

Former Japanese soldiers note that dedicated units handled the transport by rail of both material supplies and "comfort women." Takao Kojima, a rifleman stationed in Shandong, recalled that:

> Within the railway corps, there were material procurement officers responsible for securing supplies such as equipment, and they were also involved in the "procurement" of comfort women. Indeed, it was the same treatment as equipment procurement ... Plan orders were designated *kou-otsu-hei-tei* [甲乙丙丁, which transliterates to 'A,B,C,' used to denote categories of priority in the military order]. *Kou* represented orders regarding the regulation of military actions. *Otsu* represented orders for the supplies of material such as provisions and ammunition, the latter order. Those related to comfort women were category *hei* orders.[18]

An independent report by the International Commission of Jurists (1994, 47) confirms the importance of trains, even when the women were intended for overseas stations beyond mainland Asia.

Moreover, many "comfort stations" opened in existing buildings and infrastructure, rather than being built anew. Pre-existing commercial brothels or abandoned public facilities, like schools, factories, and temples, were prime candidates (Tanaka, 2002). Although there is limited data on the precise locations of such facilities, historical scholarship on colonial commercial

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(Takeshi, 2011). The Japanese military's attempt to secure north China also followed two main railways: the Tianjin-Pukou and the Peking-Wuhan routes (Drea and Van de Ven, 2011).

[18]Original Japanese cited in Nishino (1992, 172).

brothels in Asia suggest that they were nearly always situated in transportation hubs (e.g., Howell, 2004; Legg, 2012). In Vietnam, for instance, prostitution closely followed the expansion of cities, with "brothels in the 1930's and 40's …located around the train station" (Tracol-Huynh, 2017, 556).

We therefore use as pre-treatment covariates in our models *distance to locations of military campaigns* and *distance to pre-existing train stations*. To measure distance to locations of Japanese military campaigns during the war, we use the detailed chronology of the Sino-Japanese War and the Pacific War provided by Peattie, Drea and Van de Ven (2010). They identify date and location information of all military operations conducted between 1937 and 1945 in China and Southeast Asia. Using the location information provided for each campaign or battle, we identified the coordinates of the location using Google Earth. We collected location information of campaigns conducted by the Japanese as well as other powers, including the Kuomintang, the Chinese Communist Party, and the Allies.[19] Figure 4 presents the locations of Japanese military campaigns in China.

To measure distance to the railroads and train stations, we construct original georeferenced data of pre-existing railroad networks of the South Manchurian Railway Company (Mantetsu, for short) and its subsidiary firm, the North China Transportation Company. Mantetsu came into existence in 1906, following Japanese victory in the Russo-Japanese War which gave Japan control over Russian-run railways in the region. Between 1906 and the late 1930's, the company expanded the network through the construction of new lines and the incorporation of existing Chinese-owned networks and the Chosen government railway in Japanese-occupied Korea (Matsusaka, 2001).

We first extracted train station information for each railway line from Mantetsu Kai and Harada (2007), which contains declassified archival documents from the South Manchurian Railway Company; we then identified the precise coordinates of the 2,008 train stations using

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[19]See Appendix B for detail.

Google Earth.[20] We supplemented the Mantetsu train station data with existing georeferenced data for 857 train stations under the North China Transportation Company (North China Railway Archive Committee, 2019). Figure 5 presents the full train stations and railways that existed prior to 1945 in China. We include both the military and train station pre-treatment covariates in our models, described next.
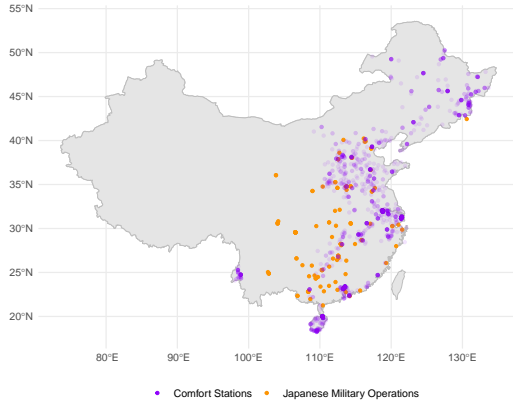

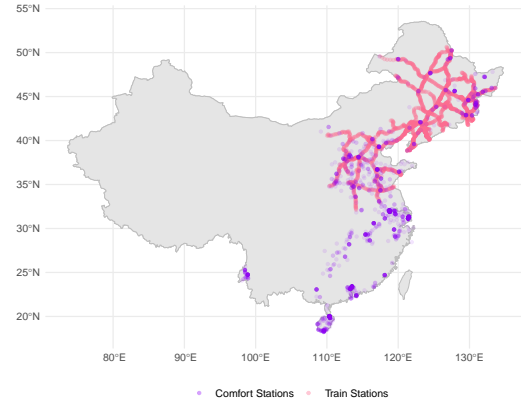Figure 4: Location of Japanese Military Campaigns in China (Source: Peattie, Drea and Van de Ven (2010))

Figure 5: Location of Train Stations in China, 1930 - 1945 (Source: Mantetsu Kai and Harada (2007))

5.3   Cross-National Analysis

Using the Asian Barometer Survey, we estimate a logistic regression model with region- and state-fixed effects. To measure historical exposure to wartime sexual violence, the key independent variable is how close individuals live to former "comfort stations" sites.[21] We compute the Euclidean distance between each survey respondent and the closest "comfort station." The greater the distance, the smaller the survey respondent's community exposure to wartime sexual violence. Geolocations of the respondents are based on the centroid of the smallest administrative unit level available in each national survey.[22] To address the skewed nature of the distance

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[20]We cross-validated the locations with qualitative information about the train stations in government and Mantetsu Kai and Harada (2007) records. See Appendix C for detail on coding procedure.

[21]Proximity to the location of violence is widely used by existing scholarship to measure exposure to political violence (Homola, Pereira and Tavits, 2020).

[22]Typically the department level.

measure, we take its log value.

DEPENDENT VARIABLES The original Asia Barometer question asks, "How much trust do you have in each of the following types of people?" followed by a series of categories, and surveytakers select a response on a 1-6 trust-distrust scale. We use the category of "your relatives" as our main outcome measure of social trust. For easier interpretation, we recode this variable as a binary indicator such that responses 1-3 are coded 1 for expressing some level of trust, and responses 4-6 take the value of 0. In the analysis below, *Trust in family* is a binary variable.[23] For political trust, we use *Trust in national government*. Survey respondents score trust in the "national government in the capital city" on a 1-6 trust-distrust scale; again, we collapse this measure to a binary indicator.

CONTROL VARIABLES We use the log value of *Distance to nearest train station*, the treatment assignment mechanism, as a control. Further, we control for the presence of military operations by Japan or other powers (Peattie, Drea and Van de Ven, 2010) with a logged distance measure between the respondent and the closest military operation site in the data.

We use a battery of demographic covariates. These include *Female*, a binary indicator; *Age*; *War generation*, a dummy variable for respondents who are aged 73 and up in 2018, corresponding to a birthyear of 1945; *Education*, an ordinal scale of educational attainment level (no formal education, primary school, secondary school, higher education); *Family status*, a 1-10 scale of the respondent's perceived status of her family; *Income* levels for the respondent and her parents; access to *Public transportation*; and an *Urban/Rural* indicator of the respondent's place of residence. The demographic covariates all come from the Asian Barometer.

5.4 Sub-National Analysis: China

We replicate the cross-national analysis in China to keep state-level factors constant and investigate sub-national variation. In our data, China has the highest share of "comfort stations,"

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[23]As alternative indicators of social trust, we use measures of trust in "neighbors" and "other people" in the survey respondent's community.

numbering over 1,700. There is also rich sub-national variation in their locations. Sixteen out of twenty-two provinces in China had at least one "comfort station." Additionally, China allows us to test the legacy effect of "comfort stations" while controlling for that of the Sino-Japanese War. Lastly, China has extensive historical datasets dating back to the 1930's and 40's that are publicly available, allowing us to more rigorously test our arguments.

Like the cross-national analysis, we estimate logistic regression models. The key independent variable is the logged distance to the nearest "comfort station" in China for each survey respondent. We include province-fixed effects in all models.

DEPENDENT VARIABLES To measure social and political trust in China, we follow Wang (2021) and use the China Survey data, a national probability sample survey conducted in 2008 by Texas A&M University and Peking University. The survey was conducted across 59 prefectures and 25 provinces in China with a sample of 3,989 respondents.

We use four variables from the China Survey. For social trust, we use *Trust in Family* which asks - how much do you trust family - on a scale from 1 (do not trust them at all) to 4 (trust them very much). Likewise, *Trust in Relatives* is based on the question - how much do you trust relatives - on the same scale. To replicate the cross-national analysis, we code these binary as well.[24]

For political trust, we use *Trust in County Government* and *Trust in Province Government*, instead of trust in central authority due to a unique characteristic of China. As noted in many previous studies on China (Tao et al., 2014; Wang, 2021), there is little variation in self-reported trust in central government, which makes it relatively uninformative in statistical analysis. For instance, almost 90 percent of the survey respondents answered they trust the central government somewhat or very much (Wang, 2021). Our main analyses thus use trust toward local government authorities: province and county governments (Tao et al., 2014). We collapse these measures to binary indicators, coded 1 when responses are 3-4.

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[24]Both measures are extremely left-skewed (most survey respondents answering 3 or 4) so we code 1 when they responded 4.

Table 3: Variables of Interest

	Cross-National: Asia	Sub-National: China
Independent Variable		
Exposure to Wartime Sexual Violence	Distance to the Nearest "Comfort Station"	Distance to the Nearest "Comfort Station"
Dependent Variables		
Social Trust	How much trust do you have in your relatives? (*Asian Barometer, 2018*)	How much do you trust your family/relative? (*China Survey, 2008*)
Political Trust	How much trust do you have in the national government in the capital city? (*Asian Barometer, 2018*)	How much do you trust the province/county government? (*China Survey, 2008*)
Control Variables		
Pre-Treatment	Distance to South Manchurian Railroad Train Station, Distance to Military Operation	Distance to South Manchurian Railroad Train Station, Distance to Military Operation
Demographic	Female, Age, War Generation, Family Status, Income (self), Income (parents), Education, Access to Public Transport, Urbanity (*Asian Barometer, 2018*)	Female, Age, War Generation, Mother's Education, Ethnic Han, Years in the Neighborhood (*China Survey, 2008*)
Province/State	Region and State Fixed Effect	Province Fixed Effect

Control Variables We use a similar set of control variables of the cross-national analysis. To control for the treatment assignment mechanism, we control for the logged distance to the nearest train station and to the nearest military operation, restircted to campaigns by Japan. Our demographic covariates include *Female*; *Age*; *War generation*; *Mother's Education*, the highest education attainment level of the respondent's mother; *Ethnic Han*; and how long the respondent has lived in the community (*Years in the Neighborhood*). They all come from the China Survey.

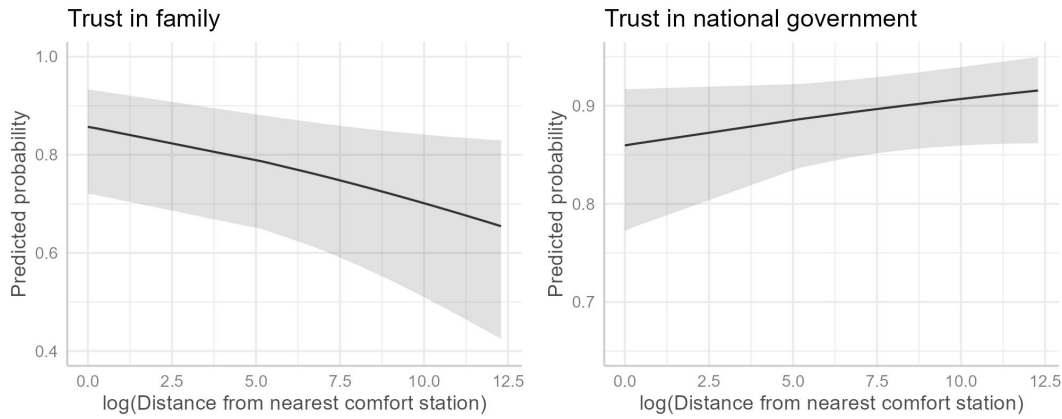Table 3 summarizes the variables of interest.

Figure 6: Distance from "comfort station" and contemporary trust in Asia

Predicted probabilities are based on estimates in Table 1 Model 1 and Table 2 Model 1 of Online Appendix D.1. Covariates are held at their means. Figure reports 95% confidence intervals.

6   Results

We first report results from the cross-national analysis. Figure 6 plots the predicted probabilities of survey respondents' expressing trust in relatives (left panel) and in the national government (right) at varying distances from the nearest "comfort station" site. We find that proximity to a station (i.e. at lower values of the distance measure) is associated with a significantly higher likelihood of trust in the family today, whereas the pattern is reversed for trust in the national government. Using alternative indicators of social and political trust yields similar results (reported in Online Appendix D.1). The results are robust to the historical pre-treatment covariate of Mantetsu train stations, distance to military operations, and region- and state-fixed effects.

The results obtain regardless of the surveytaker's generational cohort and gender (Figure 7). While female-identifying respondents tend to be slightly more likely to express social trust today, compared to men, the patterns are similar across generational and gender categories. These attitudinal outcomes closely mirror related self-reported behavioral measures. In Online Appendix D.2, we show that proximity to a "comfort station" is significantly associated with participation in social or civic community groups today, but not in political organizations.

As a robustness test, we re-estimate the models for trust in the family separately for a sub-
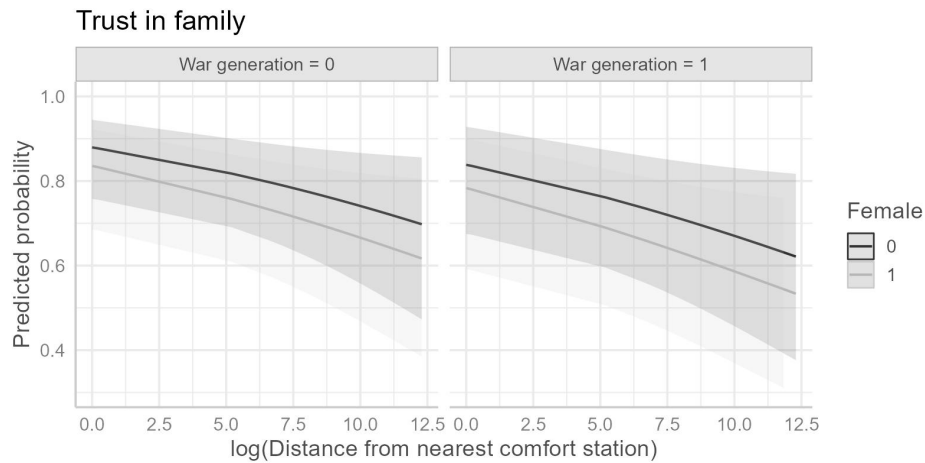
Figure 7: Legacy effect on family trust by war generation and gender in Asia

Predicted probabilities are based on estimates in Table 1 Model 1 of the Online Appendix D.1. Covariates are held at their means. Figure reports 95% confidence intervals.

sample of island nations (Philippines, Indonesia, Malaysia, and Singapore) and the rest of the Asian sample. Logistical difficulty of transport in the former region, in particular the Philippines and Indonesia, made the Japanese Imperial Army more reliant on the forced abduction of local women (Yoshimi, 2000, 94–96). Although the exact ethnic demographics of "comfort women" are not known, island nations where the main Mantetsu network would be less relevant would have had a higher proportion of local women in their "comfort stations." These nations may also have had relatively higher levels of anti-Japanese sentiment and militant activity (Tanaka, 2002; Yoshimi, 2000). However, proximity to "comfort stations" is significantly associated with a higher probability of social trust across both the island nation and mainland Asia samples, to similar degrees (Online Appendix D.3). This result makes it less likely that ethnic makeup of "comfort women" or differences in contemporaneous anti-Japanese militancy are sole drivers of the relationship between "comfort station" exposure and trusting beliefs.

Thus far, the results are largely consistent with our expectations. Turning to the subnational analysis of China, Figure 8 presents the predicted probabilities of survey respondents trusting their family (left panel) and province government (right) by distance from the nearest "comfort station" in China. Confirming our findings from the cross-national analysis, we again
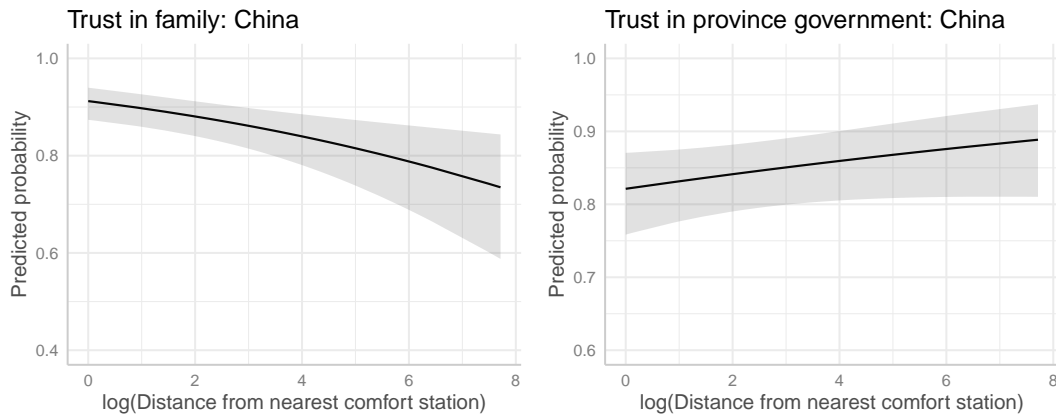
Figure 8: Distance from "comfort station" and contemporary trust in China

Predicted probabilities are based on estimates in Table 5 Model 1 and Table 6 Model 2 of the Online Appendix E. Covariates are held at their means. Figure reports 95% confidence intervals.

find that the proximity to a "comfort station" (i.e., a greater exposure of wartime sexual violence) is associated with trust in family today. However, the pattern is the opposite for political trust; the closer one lives to a "comfort station," the less likely she is to express trust towards the provisional government. The results are robust to controlling for pre-treatment covariates and using alternative social and political trust measures (e.g., trust relative/neighbors and trust in county government) as reported in Online Appendix E.

Consistent with the cross-national analysis, the findings from China remain constant across survey respondent's generational cohort and gender. Figure 9 shows that female respondents are slightly less likely to trust family than men, and the patterns are similar in both generations. Both men and women, regardless of their exposure to war, are more likely to express trust toward family when living closer to a "comfort station" site.

We run two robustness tests: a placebo test and a separate analysis of Manchuria. For the placebo test, we run the same models with the Sino-Japanese War casualty as the independent variable, testing whether violence against civilians has a similar effect on social and political trust of today. We find that casualties have a negative relationship with both political *and* social trust. Survey respondents residing in provinces that were more severely affected by
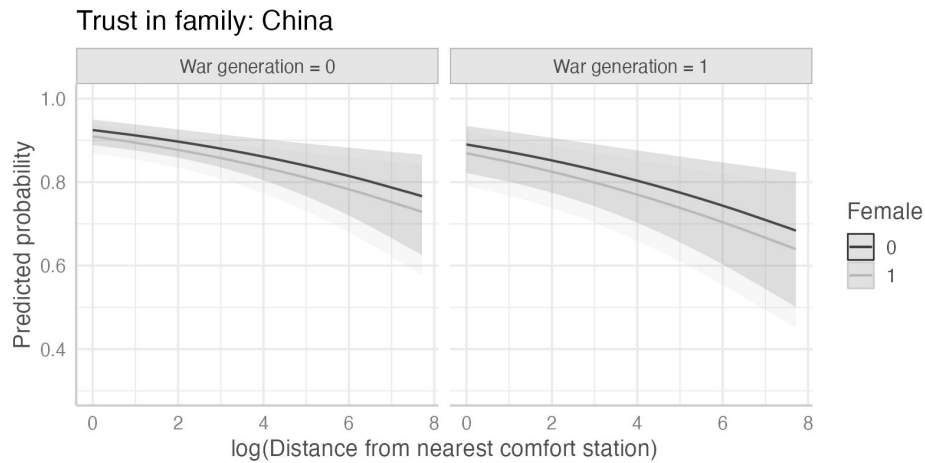
Trust in family: China

Figure 9: Legacy effect on family trust by war generation and gender in China

Predicted probabilities are based on estimates in Table 5 of Model 1 of the Online Appendix E. Covariates are held at their means. Figure reports 95% confidence intervals.

wartime casualties exhibit lower political and social trust, compared to those in regions with fewer casualties. This finding aligns with existing studies demonstrating how political violence can undermine social trust, while also suggesting that exposure to wartime sexual violence has a distinctive effect on social trust. Online Appendix F reports the results.

Second, we re-estimate the models in three provinces - Heilongjiang, Liaoning, and Jilin - in Manchuria, which includes Manchukuo, the puppet state created by the Japanese in 1931. We use the site as a robustness test to ensure prewar differences in Japanese colonial presence and investments do not confound the results. Using the the Manchuria Japanese Military Maps Index (CHGIS, 2015), we control for whether survey respondents live in neighborhoods that were historically part of Manchukuo—that is, in former colonized territories. As reported in Online Appendix G, our results remain consistent. Survey respondents who live closer to a "comfort station" respond with higher levels of trust in family and relatives but lower trust in province and county governments. Notably, social trust is higher in regions that were under Japanese control. Though tentative, this result is consistent with our theory that kinship networks become crucial coping mechanisms in the absence of state protection. Individuals living in areas formerly Manchukuo are also less likely to trust province government today than those who

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did not, further suggestive evidence that distrust of authorities persist in areas with a history of state absence.

7 Oral Histories

We now turn to qualitative evidence from oral histories of surviving "comfort women," former soldiers who observed and occasionally developed enduring relationships with these women, and other witnesses.[25] Recall our argument that social trust increases in affected communities due to the scarcity of coping mechanisms to deal with the enormity of rape trauma. Testimonies furnish evidence of this claim. Surviving women often found themselves in foreign lands, with little institutional recourse. Yet, the local community was typically aware of the existence of "comfort stations" and the presence of ex-"comfort women."[26] As surviving women integrated into local communities through marriage and local work, they forged solidarity amongst each other as well as new family and social ties to navigate postwar stigma and related hardship.

As noted in Section 4, the local postwar resettlement of surviving "comfort women" was common. Many Korean comfort women resided in foreign lands such as China and present-day Cambodia and Myanmar (Chan, 1986; Qiu, Zhiliang and Lifei, 2014). Indonesian "comfort women" from Singaporean *ianjo* settled in the Malay community in the region and married local men (Blackburn, 2022). Locally displaced women faced similar struggles to return home. Indonesian girls and women, taken from Java to elsewhere in the archipelago, settled in Flores and Buru, near the very "comfort stations" where they had endured torture (Tanaka, 2002; Toer, 2013 (2001)).

The end of the war did not rid communities of highly patriarchal values that treated survivors as 'low-class' and 'immoral.' Some faced accusations of "betraying the nation" by "work-

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[25]The testimonies we rely on were collected by third parties, such as the International Commission of Jurists (1994), and independent researchers, and in some cases overlap with the sources used to construct the "comfort station" data.

[26]See e.g., Kawana (2023 [1982]).

ing for" the Japanese Imperial Army (Qiu, Zhiliang and Lifei, 2014, 158). Politicians would also cast moral aspersions on survivors. In Singapore, male community leaders publicly condemned their own nationals who had worked as "comfort women" (Blackburn, 2022). Such indifference and even open antagonism may have allowed the distrust of local state institutions to persist across generations. A Korean survivor, Pae Chok-kan, expresses sentiments that are consistent with this logic (cited in Soh, 2008, 190):

> After all, Japan was at war. They wanted to win the war. They could not have done that without doing evil things. Actually, I blame Korea most. The fact that our country was weak. Were we a strong country, it would not and could not have happened. …we let it happen to us because we were not powerful enough.

Personal shame associated with rape, combined with national authorities' reticence and refusal to provide institutional recourse, compelled women to turn to solidarity among each other, both during and after their ordeal. Jan Ruff-O'Herne, a Dutch "comfort woman" who had been in a Semarang camp in Central Java, Indonesia, recalls how older women looked out for younger girls (cited in Soh, 2008, 178):

> When some young girls had been taken out of their prison camp, two of them only sixteen years old, Dolly and Yvonne [two older Dutch women working for the military] felt sorry for them and suggested to the Japanese that they could go in their place …My thought went to the two young girls who were spared because of Dolly and Yvonne.

Japanese soldiers, too, recall women looking out for each other. Honda (pseudonym), a veteran who had been called to military duty in 1939, recalls a "strong moral code" of justice and loyalty among Korean women in Hankow (cited in Nishino, 1992). Women would refuse soldiers who were known to be "Ms. So-and-so's customer" that "made it impossible [for soldiers] to get to know all the women laboring at the same *ianjo*" and prey on younger girls in the station. Banding together was a strategy of survival, particularly among those who bore children of the Japanese soldiers. Kazuhiko Ozawa, a former navy ensign, said some "comfort women" who became

pregnant on the frontlines were forced to have the child because "The chief military doctor would say, 'A doctor of the Emperor's army cannot in conscience perform an abortion on some *chōsen-pī* [朝鮮ピー, a derogatory Japanese term used to describe Korean prostitutes, with *pī* seemingly derived from a Chinese expression denoting female genitalia]'" (cited in Nishino, 1992, 166–167).

Another recurring theme is the need for the roof of patriarchal protection and the role of family to survive the trauma in the postwar years. Li Lianchun, a survivor in Yunnan Province, emphasized the support of her children after the war: "My daughter has helped me tremendously ever since she was a little girl" (Qiu, Zhiliang and Lifei, 2014, 124). She also describes frequently turning to her local *ganma* (fictive mother)[27] who would temporarily house her and nurse her back to health as she struggled with the lingering physical trauma of rape.

Although local husbands varied in terms of their open-mindedness, they were one source of protection. In the case of Narcisa, a Filipina survivor, her husband "helped her mentally heal and encouraged her to tell her story" (McCarthy, 2020). The ICJ's near verbatim account of Julia Porras's experience similarly suggests how narratives first circulate in the family. While "indignant at those people in Japan or in the Philippines who have insinuated that the women went voluntarily," Julia found in her family the safety to tell her story (International Commission of Jurists, 1994, 61–62):

> Ms. Porras did eventually marry; she was unable to tell her husband about what had happened to her until recently. Her husband had been a member of the Philippine resistance movement and when she eventually did tell him, he was very supportive. Some of her children were against her coming forward and telling her story; one daughter was very supportive and said to her "it is good that you lived; you should tell your story."

Recurring episodes illustrate how neighbors and the wider local community became a source of resilience for survivors who settled near "comfort station" sites. Some forms of support were

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[27]A common way of describing particularly close members of the community with kinship terms plus the term *gan* (Qiu, Zhiliang and Lifei, 2014, 124).

essential for sheer survival. In Palau, for instance, local residents helped Kang Soon-Ae and other Korean "comfort women," who were unfamiliar with the environment, to "select edible fruits and vegetables" growing on the island when food supplies ran low (International Commission of Jurists, 1994, 89). At other times, the support is more substantial, helping women to make ends meet. Consider the case of Gertrude Balisalisa (cited in International Commission of Jurists, 1994, 74–75):

> I was left alone in that province and I didn't know anybody over there. He just gave me fifty pesos, which was not even enough for my travel expenses …I was left to fend for myself. I started giving private tuition, which I am doing even today. My neighbours and friends sometimes help me out by asking me to draft their affidavits and short statements. They also help me in other ways.
>
> I managed to pick up enough courage to [go public]. After I went public in this way, many of the pupils who were taking private tuition from me were withdrawn by their parents. However, most of my neighbours are supportive and understanding. After coming out in public and after sharing my suffering with other former comfort girls, I feel better and unburdened. However, I am unable to support myself or even to pursue any medical treatment for want of funds.

The social support from her community, though incomplete, remains after Gertrude's decision to go public. This stands in contrast to the perceived inadequacy of institutional responses, from both the Philippines and Japan, to her precarious situation.

In Hwang Kum Joo's case, neighbors stepped in to aid her new adopted kinships (cited in International Commission of Jurists, 1994, 98):

> I developed a close friendship with a man but I could not continue that friendship because of my disease and my bleeding. I took care of five children who were orphaned during the war. …However, when I tried to have them admitted to school, these children could not be registered as my children. They therefore had to be put in school under my neighbours' names.

In other instances, surviving women themselves serve as the conduits for maintaining social connections across generations. 'Grandma M,' a Korean woman abducted from her home to a "comfort station" in Wuhan, Hubei Province, China, escaped the station in August 1945. Instead

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of returning home, "feeling disgraced," she settled in Huxi Village in the same province (cited in Qiu, Zhiliang and Lifei, 2014, 158). Over the decades, she received "affectionate support from the local people," and today she is regarded as an influential maternal figure in the community. "The villagers call her 'grandma,'" note the interviewers, "and she proudly considers herself to be Chinese" (Qiu, Zhiliang and Lifei, 2014, 158).

Although the narratives of survivors, their families, and witnesses are not monolithic, in-group bonds and community ties are recurring themes in these oral histories. The intergenerational transmission of stories and trusting relationships seem to begin in the household—daughters and granddaughters figure prominently in survivor narratives—while mutual aid beyond the family reinforced these bonds over time as survivors became embedded in the community through local marriage, new kinship ties, and work.

8   Conclusion

Exposure to wartime sexual violence has a lingering effect on political and social trust of today. Focusing on the case of WWII "comfort stations," we demonstrated that proximity to these stations predicts a significantly higher likelihood of social trust within family, relatives, and the local community, while having a negative or null relationship with political trust in government. These results are robust to controlling for war casualties and military operations, as well as prewar covariates that include Japanese colonial presence. Qualitative evidence highlights the enduring role of social bonds among survivors and their communities as a means of overcoming the trauma of rape.

This article extends the scholarship on the legacy of World War II (e.g., Charnysh, 2015; Grosjean, 2014; Harada, Ito and Smith, forthcoming; Homola, Pereira and Tavits, 2020) by broadening its theoretical and empirical focus to sexual violence and Southeast Asia, both of which have received limited attention. While existing sociology and historical research on "comfort women" has primarily focused on East Asia, particularly on the redress movement

in South Korea (Min, 2003, 2021; Min, Chung and Yim, 2020; Soh, 2008), our original data on "comfort stations" reveals their extensive presence across Southeast Asia, with over a thousand locations identified. Through oral histories of survivors in the region, we also document the lasting impact of these stations.

In addition to shedding new light on the experiences of "comfort women," our study addresses broader issues of conflict, gender, and historical memory. Our findings contribute to the literature on historical legacies by highlighting the distinctive role of communal coping mechanisms as a result of wartime sexual violence in the absence of institutional redress. This result may indicate that some consequences of wartime sexual violence follow a distinct logic from broader violence due to its stigmatized nature (Koos, 2017). While our focus is on Japan's historical case, the institutionalized nature of wartime sexual slavery has parallels in contemporary conflicts. The findings thus suggest new directions for exploring the attitudinal effects in other empirical contexts. Further, while our research focused on social and political trust as outcomes, future research could consider the legacy effect of wartime sexual violence on post-colonial reconciliation and foreign policy preferences (Jo, 2022).

Finally, our research expands the scholarship on wartime sexual violence by documenting *historical* wartime sexual violence and quantitatively testing its legacy effect. Existing research on historical wartime sexual violence has been mostly qualitative (Chang, 2014), primarily due to lack of documents and data recording where and when such crime occurred during wars. Studying historical wartime sexual violence becomes more challenging as survivors, on whom existing studies rely for testimonies and interviews, age or pass away. By geocoding the locations of "comfort stations" based on the archived testimonies and memoirs, we are able to not only quantitatively measure the scale of violence in the past but also preserve the stories of survivors.

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