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# Armed and Explosive? An Explorative Statistical Analysis of Extremist Radicalization Cases with Military Background

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## ABSTRACT

Extremist infiltration of armed forces, and the spread of violent radicalization among service members and former soldiers, are a growing international concern. With an increased number of active duty and former soldiers involved in extremist and terrorist milieus, the public fears that national security might be compromised by potential terrorists using their training, equipment, and networks against the countries they swore to protect. This is a serious impediment to the trust in authorities for many nations. However, little empirical research exists on either the scope of the problem, or the specific risk factors that might be involved in turning military personnel toward extremism. In this paper, we utilize the “Profiles of Individual Radicalization in the United States” (PIRUS) dataset to shed light on the vulnerability and risk factors into the extremist radicalization of military personnel. Our findings indicate that far-right radicalized individuals with military backgrounds are more likely to suffer from trauma, a diminution of social standing, having difficulties in romantic relationships, and exclusion from participation in social groups or organizations, compared to far-right radicalized individuals without military backgrounds. Mental illness, grievance, and anger toward society are also more present in the far-right military group compared to the non-military group.

## KEYWORDS

PIRUS; extremist radicalization; military background; extremism

## Introduction

Over the last decade, an increasing number of incidents involving military personnel who turned to violent extremism and terrorism has nurtured a fear among the public, that some countries’ national securities might be compromised by extremists and potential terrorists with a military background. After the attack on the U.S. Capitol on January 6, 2021, the fact that nearly 20 percent of the defendants charged with various crimes had a military background<sup>1</sup> led to a public outcry. Some of the extraordinary reactions from policymakers to the attack included an order signed by Defense Secretary Lloyd Austin directing commanding officers and supervisors to institute a one-day stand-down within a period of 60 days to address extremism within the armed forces.<sup>2</sup> Individuals with partially long and distinguished service records were also among the attackers<sup>3</sup> and were those who appeared to have been the best prepared for a strategic takeover of the building.<sup>4</sup> Even before this incident, a Pentagon report warned of the threat from white supremacists within the military due to their potential to carry out “high-impact” attacks.<sup>5</sup>

Radicalized active duty soldiers have carried out extremist acts of violence, and former service members have been known to join extremist groups long before the January 6 attack. Some additional recent examples include how members of various armed forces (including the French, Irish and

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Malaysian militaries) have joined jihadist groups, such as the Islamic State in Iraq and Syria (ISIS).<sup>6</sup> The Salafi-Jihadi extremist ideology also influenced Major Nidal Hassan (United States Army Medical Corps), who shot and killed 13 people, and wounded 33 during the terrorist attack he unleashed at Fort Hood, Texas, in 2009. This is still one of the best known cases of radicalized active duty military personnel.<sup>7</sup> Hassan reportedly suffered from severe grief after losing both his parents in the 10 years before his attack, and had sought counsel from an extremist preacher and cleric, Anwar Al-Awlaki, who was later killed in a U.S.-drone strike in Yemen.<sup>8</sup> Ten years later, on December 6, 2019, the second lieutenant of the Royal Saudi Air Force, Mohammed Saeed Alshamrani, attacked the Naval Air Station Pensacola in Florida, killing three men and injuring eight. Alshamrani, who was participating in aviation training at the station, is believed to have been radicalized since at least 2015, and became a follower of jihadist ideologues and the terrorist group al Qaeda in particular.<sup>9</sup> As a result, 21 Saudi military cadets were expelled from the United States.<sup>10</sup>

There are also numerous well-documented incidents of other forms of violent extremist radicalization involving military personnel. In June 2020, for example, U.S. Army Private Ethan Melzer was charged with terrorism offenses by the Justice Department, for plotting an ambush on his own unit. His plan was to pass on sensitive information about his unit's deployment to jihadist groups, via an occultist neo-Nazi group named the "Order of the Nine Angels" (ONA).<sup>11</sup> This is by far not the most prominent case in recent years. U.S. Coast Guard, Lieutenant Christopher Hasson, was arrested in February 2019, for allegedly plotting extreme right-wing and large-scale terror attacks, which included the potential use of biological and chemical weapons. Other countries have experienced such cases as well. In Germany, the army's first lieutenant, Franco A., was arrested in April 2017, and charged with plotting a false flag terror attack, together with another officer and a civilian. Additional revelations of extreme right wing views in the German military led to the unprecedented step of disbanding a whole combat platoon of the elite KSK special forces unit in 2020 because it was deemed irreversibly influenced by far-right views.<sup>12</sup> Another example from Germany is the case of a soldier who was arrested in February 2021 along with his father and brother. Authorities discovered a cache of illegal weapons and explosives, as well as an extreme right manifesto, indicating that a potential terror attack had been thwarted.<sup>13</sup> In the United Kingdom, Lance Corporal Mikko Vehvilainen, a veteran of the Afghan war and soldier of the Royal Anglian Regiment, was sentenced to eight years of imprisonment in November 2018, for his membership in the right-wing terrorist organization known as the National Action. He had also attempted to recruit fellow soldiers.<sup>14</sup> Finally, the National Gendarmerie (the national guard) in France reported dozens of cases of extremist radicalization mostly with religious and extreme right background in 2020.<sup>15</sup>

These cases display the potential threat of active duty military personnel who might get radicalized toward extremist violent acts. However, incidents in which veterans participate in extremist milieus, after transitioning into civilian life are arguably more common. Here too, skills and training (for example, in handling weapons and explosives or combat tactics) can prove to be highly lethal when available to extremist and terrorist groups and/or lone actors.

Beyond military personnel engaging in terrorist acts themselves, it has also come to the attention of public observers that soldiers sometimes participate in other behaviors connected to extremism, such as joining far-right groups,<sup>16</sup> posting on neo-Nazi online communities,<sup>17</sup> or providing bomb-making instructions to foreign extremist groups.<sup>18</sup> These actions can be seen as the tip of the iceberg from the unknown scale of extremist views and attitudes within armed forces. A recent poll among active-duty U.S. troops revealed that one third of service members had personally witnessed examples of what they deemed to be white nationalism and ideologically driven racism within their own ranks.<sup>19</sup> Unfortunately, factors conducive to the spread of extremist attitudes and behavior among military personnel have been little studied so far, and typically done so only with a focus on specific elements such as racism, nationalism, or authoritarianism. In the light of advances in the study of violent extremist radicalization processes potentially leading to involvement in terrorism, much more comprehensive and comparative research is warranted.

The present study, therefore, aims to explore potential risk factors in the extremist radicalization of military personnel through a comparison of extremists with and without a military background. Through this approach, an initial identification of group level characteristics provides a starting point for future research in this field. We further believe that empirical knowledge about potential vulnerability factors is essential to formulate effective counter measures and prevention strategies. For this purpose, we utilized the “Profiles of Individual Radicalization in the United States” (PIRUS) dataset, which contains 228 case entries with military backgrounds.

## Background and theoretical framework

There is, to our knowledge, no evidence that military service or training in itself leads to radicalization,<sup>20</sup> nor do we propose that it does. Nevertheless, the issue of extremist radicalization of active duty soldiers, or those with service backgrounds, is of interest, because of the tactical capabilities for violence from the potential attackers, which might come from their military training. Consequently, many, if not most extremist groups, have shown an interest in recruiting such highly valuable members.<sup>21</sup> In 2008, the Federal Bureau of Investigation (FBI) found that that leaders of extremist groups have historically favored people with military experience as future members. A 2009 report by the U.S. Department of Homeland Security (DHS) concluded that right wing extremists were actively trying to recruit and radicalize veterans for the same reasons.<sup>22</sup> At the time of both reports, significant public outcry against a perceived demonization of the military and veterans led to the dismantling of a DHS task force<sup>23</sup> focusing on this issue, and the subsequent failure to monitor this potential threat. This was the case until a wave of extreme right violence, and the spread of hate groups with the involvement of former or active military personnel, forced the issue back into public attention during Donald Trump’s presidency.

Extremist radicalization of military personnel is still an understudied subject and is typically compartmentalized into various components that might each contribute to involvement in what is now termed “violent extremism.” For example, factors and processes involved in war crimes committed by soldiers in wars such as the Second World War<sup>24</sup> or the Vietnam War<sup>25</sup> have been explored. Furthermore, issues such as racist,<sup>26</sup> nationalist,<sup>27</sup> or authoritarianist<sup>28</sup> attitudes among military personnel, as well as the effects of combat experience on the desensitization to violence, have also been the subject of various studies.<sup>29</sup> However, a more comprehensive picture that helps explain why, when, and how today’s military personnel might be attracted to modern extremist milieus in thought or action is lacking. As a starting point for our own analysis we refer to earlier research by Simi, Bubolz and Hardman. They hypothesized that “identity discrepancies occur when individuals experience involuntary role exits from the military or when individuals perceive that personal achievements earned while enlisted are unrecognized or unappreciated.”<sup>30</sup> These identity discrepancies are seen as driving factors toward right-wing extremism, and potentially even terrorism. In a similar vein, the seminal study on the connection between military service, experiencing a war, and the evolution of far-right extremism in the post-Vietnam War U.S. by Belew,<sup>31</sup> argues that for certain returning veterans, a profound alienation with the country that had sent them to war, and a perceived betrayal of the values they had fought for, propelled many into anti-government right-wing extremist milieus.<sup>32</sup>

Furthermore, it has been suggested that extremist radicalization, and the psychological process of becoming a soldier (i.e., “martialization”) share many important parallels, such as the sense of vicarious injustice, the need for belonging/identity, meaning, excitement, and glory, as well as active recruitment, indoctrination, and group solidarity.<sup>33</sup> Indeed, for an outside observer, the integration into a normative enforcing, salient, and collective identity environment, which is centered around the use of violence and strong ideals (e.g., honor, justice, heroism, bravery, warrior culture) aimed at protecting or spreading a specific political ideology, can easily appear to be the same process in regular militaries, as well as in extremist milieus.

A further indication of potential similarities between the psychological processes involved in extremist milieus and the military can be seen in their shared disengagement dynamics. By comparing “ideological groups” in which “members are encouraged to adopt salient group roles that overlap other

self-aspects,” Harris, Gringart, and Drake looked at members of special operations forces and white supremacists (among others), and found that across these various types of groups, “the experience of an initial trigger” resulted in a perceived inconsistency between one’s self-concept and the group. This, in turn, led to a threat of the defector’s psychological integrity and exit from the group.<sup>34</sup>

One specific psychological similarity between the two groups considered in this study might be the so-called “heroic doubling,”<sup>35</sup> which involves the mental creation of a sacred warrior identity, existing in parallel to another self-concept. Extreme acts of violence from people who are not suffering from psychiatric disorders might influence them to kill and die for a higher cause, giving them a sense of purpose and sacrality. It was argued that such a process can be found among terrorists, as well as military formations, such as the Nazi SS, U.S. Marine Corps, or British SAS.<sup>36</sup> Likewise, the willingness to sacrifice one’s own life for a cause or ideology has been explained through the existence of sacred values in the Devoted Actor Theory (DAT), which is based on the development of the fused individual and collective identities among soldiers in war, or suicide bombers in terrorist groups.<sup>37</sup> The effect of sacred or sacralized values on the willingness to commit violence and self-sacrifice has also been shown in some neurological studies.<sup>38</sup> Indeed, some research has demonstrated the specific warrior identities that are nurtured, for example, in the extreme right, leading to the cultivation of a “fight till the end” mentality that is connected to heroification and idolization of those who follow this path.<sup>39</sup> The extreme right is also known to ideologically draw from pagan mythology regarding a glorious warrior’s death (e.g., through subcultural references to Valhalla).<sup>40</sup> Such mechanisms of heroification within extremist milieus might act as effective psychological bridges to military environments, helping to recruit veterans who struggle with adapting to civilian life and post-martial identities. However, there is very limited research existing on the potential similarities between martialization (the process of becoming a soldier) and extremist radicalization, most of which is theoretical in nature.

Furthermore, it is important to point out the need to differentiate between several forms and types of extremist milieus, which might look attractive to former military service members. Arguably, far-right extremism has affected military personnel, at least in Western countries, significantly more than left-wing extremist or Salafi-jihadist radicalization. This could be due to the cultural and ideological proximity between the military and ultra-nationalist extremist milieus. It can be argued that the far-right’s toxic patriotism (among other ideological elements, such as racism) forms a particularly effective gateway to military environments. Of course, extremist radicalization processes can theoretically occur in every environment, even though they are highly context specific. Despite the rapidly growing literature on mechanisms, factors, and influencing events that may contribute to extremist radicalization, and what may be done to prevent it,<sup>41</sup> scholars are yet to develop a consensus on these basic mechanisms.<sup>42</sup> Nevertheless, a 2018 review<sup>43</sup> of the factors driving radicalization with high empirical support, pointed out strong and moderate evidence for (among others) the impact of negative life experiences, influences of fundamental uncertainty, heightened dispositional anxiety, aggression and impulsivity, and the role of negative emotions, such as anger and contempt. Some other important elements are the lack of a general psychopathology, the importance of motivational processes rather than rational choice calculations, a shift in social identity, small group dynamics, sacred values, and a psychological mindset of authoritarianism, dogmatism, and fundamentalism. Particularly, the combination of small group dynamics, sacred values, negative life experiences (e.g., killing, death, and war), and the nurturing of negative emotions, such as anger and hatred against an enemy, can be hypothesized as strong overlaps between the military and extremist milieus. In short, messages from certain extremist groups, and ideologies with a high affinity for nationalism and patriotism, may fall on fertile ground in the military environment.

Our considerations to this point have also indicated the potential role of mental health issues, such as trauma, in the development of extremist attitudes and behaviors. The connection between mental health and radicalization have received renewed scholarly interest recently.<sup>44</sup> Specifically, a landmark systematic literature review by Gill et al. identified a wide array of mental health issues found among extremists and terrorists, among which trauma and substance abuse induced disorders are prevalent.<sup>45</sup> Especially relevant to the potential mental health impact of deployment is Post-Traumatic Stress Disorder (PTSD).<sup>46</sup> Recent

research argued that this condition itself cannot be counted as a risk factor for radicalization, but interacts with other influences, and might facilitate that process once it has begun.<sup>47</sup> However, existing research has confirmed the equifinality of extremist radicalization over time. In the complex interplay of multiple factors, mental health issues can be important for some, but not for others. In short, multiple different trajectories into violent extremism do exist, and our present study aims to gain further insight into the military background trajectory leading to extremism and terrorism.

## Aim

Based on the literature available on both military personnel radicalization and extremist radicalization, there are sufficient grounds to hypothesize that mental health issues (e.g., trauma, substance abuse) suffered or developed by soldiers during military service, and the grievances and alienation from the previously served nation in some kind of political context might play a major role in this process. As such, we aim to explore how social and psychological risk factors, as (among others) presented by Gill et al.<sup>48</sup> and Gøtzsche-Astrup,<sup>49</sup> differ among extremists who may or may not have a military background. More importantly, our exploratory analysis does not aim to produce generalizable results or causal evidence for the specific vulnerability factors we identify. Instead, we strive to carve out group level characteristics, to provide a starting point for future research on military personnel and extremist radicalization through the lens of our theoretical framework. We believe that informed knowledge on these vulnerability factors will not only help to direct future research endeavors, but also prevent and counter violent extremism (P/CVE) programming within the military, or with veterans after active duty. With those implications in mind, we focused on the following research question:

- How much do extremists with military backgrounds differ from those without it, regarding social and psychological risk factors from the PIRUS database?

Since we had to rely on a pre-existing dataset for our research (the PIRUS database), operationalizing the previously summarized hypothetical risk factors and suggested impact mechanisms from scratch was not an option. Instead, we decided to select those factors already present and coded in the PIRUS database that displayed the best fit regarding our literature review and the identified potential risk factors. In short, our variable selection was guided by the review of the state of the art. We have grouped the variables into mental health, grievances, and alienation categories. Consequently, we decided to focus our exploration on the PIRUS dataset factors presented in [Table 1](#).

This variable selection in our view forms the best possible representation of the potential radicalization mechanisms and risk factors identified in the majority of the existing scholarship, in particular, the

**Table 1.** Included risk factors.

Theoretical dimension	Variable description	PIRUS Variable nr.
Mental health	Abused as a Child?	82
	Abused as an Adult?	83
	Mental illness?	85
	Drug or alcohol abuse?	86
	Traumatic experience?	108
Grievances and alienation	Work history prior to exposure date?	76
	Social stratum as a child?	79
	Social stratum as an adult?	80
	Difficulty finding or maintaining romantic relationships?	98
	Difficulty finding or maintaining non-romantic relationships?	99
	Socially ostracized?	102
	Angry with the U.S.?	110
	Group grievance?	111
Diminution of social standing prior to radicalization?	112	



suggested role of mental health issues (PIRUS variables nr. 82, 83, 85, 86, 79, 98, 99, 108) and grievances or alienation from the previously served nation (PIRUS variables nr. 76, 80, 102, 110, 111, 112).

## Materials and methods

For this study, we used data from the PIRUS dataset published in November 2019.<sup>50</sup> In this section, we present the descriptive characteristics of radicalized individuals with a military background. The PIRUS dataset places a focus on deployment and active service during radicalization (Table 2). In our operationalization of the terms “radicalization” and “violent extremism,” we relied on the PIRUS project inclusion criteria, leading to the dataset we utilize here. According to the PIRUS codebook version 3.2 from October 2018, “anyone arrested, indicted, and/or convicted of either engaging or planning to engage in ideologically motivated unlawful behavior, or anyone who belonged to a designated terrorist organization or a violent extremist group”<sup>51</sup> was eligible for inclusion in the dataset. We grouped all military related variables together, and provided the general features regarding radical ideology in Table 3. Thereafter, we compared them at the group level with all the non-military background entries of the PIRUS dataset (Table

**Table 2.** Military service history.

Military service—Was the individual ever in the U.S. military?	<i>n</i> = 228	%
Yes, inactive at time of radicalization, unknown deployment	94	41.2
Yes, inactive at time of radicalization, never deployed	27	11.8
Yes, inactive at time of radicalization but previously deployed	55	24.1
Yes, active at time of radicalization, unknown whether ever deployed	16	7.0
Yes, active at time of radicalization but never deployed to an active combat zone	12	5.3
Yes, active at time of radicalization and had been deployed to an active combat zone	24	10.5
<b>Total</b>	<b>228</b>	<b>100</b>

**Table 3.** Type of radicalization.

Type of radicalization	<i>n</i> = 228	%
Islamist radicalization	38	16.7
Far-right radicalization	123	53.9
Far-left radicalization	26	11.4
Single issue radicalization	41	18.0
<b>Total</b>	<b>228</b>	<b>100</b>

**Table 4.** Far-right military cases compared to far-right non-military cases.

		<i>n</i> = 123		
Theoretical dimension	Variable	Sig.	Phi	Odds ratio (OR)
Mental health	Abused as a Child?	0,941	-,003	0,962
	Abused as an Adult?	0,081	,077	6,463
	Mental illness?	0,023*	,099	1,752
	Drug or alcohol abuse?	0,358	,038	1,257
	Traumatic experience?	0,000**	,323	4,769
Grievances and alienation	What is the individual's work history prior to their date of exposure?	0,018*	,158	2,559
	Social stratum as a child?	0,398	,078	1,652
	Social stratum as an adult?	0,792	-,017	0,926
	Difficulty finding or maintaining romantic relationships?	0,005**	,209	2,558
	Difficulty finding or maintaining non-romantic relationships?	0,249	,084	1,608
	Was subject ever known to be marginalized, ostracized, or dismissed from any social, cultural, religious, or political groups or organizations?	0,002**	,245	3,202
	Angry with the U.S.?	0,001**	,173	2,383
	Group grievance?	0,001**	,179	2,739
	Diminution of social standing prior to radicalization?	0,004**	,232	3,531

\*significant at 0,05 level, \*\* significant at 0,01 level

4). As a second analytical step, we compared all cases with military backgrounds in each ideological category with those in the same category without military background (Tables 5–8).

Chi-square tests of association between military and non-military cases, and various social and psychological risk factors, were calculated to this end. All data analyses were carried out on IBM SPSS version 25. Initial data management involved grouping all the cases with military service background into one new binary variable. This means that all six categories of military services were grouped together as one in our analyses, and compared against all non-military cases. In Table 2, the categories of the original military variable are presented.

For more information about the specifics of the various variables, we refer to the PIRUS Codebook.<sup>52</sup> When reviewing the information provided through PIRUS, the issue of missing data surfaced, as well as certain variables with a significantly lower cell count. We approached this by recoding the variables with *more than* two categories into a two-category variable. This naturally increased the risk of reducing some nuances within the variables. However, since the chi-square test is sensitive to low cell counts (at least 80 percent of cells should have expected frequencies of 5 or more), the recoding helped us to minimize the risk of violating the underlying assumptions of the test.<sup>53</sup> The following variables were recoded into two category variables, by grouping alternatives 0 and 1 into “0,” and 2 and 3 into “1”: Work history, Social standing, Abuse as a Child, Abuse as an Adult, Traumatic Experience, Group Grievance, Mental Illness, Social Stratum during Childhood, and Social Stratum during Adulthood.

### **Methodological limitations**

The first significant limitation of our study is the small *n* sample of 228 cases. Compared to the phenomenon of extremist radicalization in general, and the overall PIRUS dataset (of 2,226 cases), our sample is quite clearly limited. Our goal is to move beyond the currently theoretical or anecdotal knowledge of military background radicalization trajectories by exploring the PIRUS database for empirical support for the relevance of specific social and mental health vulnerability factors, as suggested in the available literature. Their specific impact on radicalization should be studied in more detail in the future. Hence, we hope to present the first selection of promising influencing factors, and a theoretical explanation for these, as derived from the literature.

Another limitation must be pointed out regarding the actual comparison of far-right extremists with a military background and the complete PIRUS sample, which also includes other types of extremist ideologies. As the far-right group is substantially larger than all of the other groups with military background (see Table 3), we decided to focus our analysis on this group only in order to produce a more precise analysis. We did compare each ideological group in itself (for those with and without military background) and the results can be found in the separate online appendix.

The second important limitation comes with the structure of the PIRUS dataset itself. This valuable and groundbreaking database was collected and is administered by the National Consortium for the Study of Terrorism and Responses to Terrorism (START), at the University of Maryland.<sup>54</sup> We found that the lack of chronological information from data collected on several points in time for each code impedes the potential for causal explanations. In essence, it was not possible for us to determine when other risk factors occurred, in relation to the time of military service and radicalization. A traumatic life experience, for example, could happen before, during, or after military service. As Table 4 will show, a large majority of the cases in our sample set has prior military experience. However, we do not know if, for example, a radicalization trajectory started immediately after military service, or if it started years later. As such, our work is based on the hypotheses presented in the theoretical framework. With timestamps on events, collected at several points in time, advanced statistical modelling would have allowed us to explore how different events might have correlated and influenced certain phases in the radicalization process. However, without these data, such analysis was not possible. Nevertheless, we clearly acknowledge the immense value of the PIRUS database, which is compiled using open sources like newspaper articles and court documents. Of course, since we relied on pre-existing variables coded in the database, we were not able to operationalize the previously identified



risk factors as we saw fit. Hence, the PIRUS variables only represent the best possible fit to our theoretical framework.

A third limitation comes with the statistical method we chose, namely, the nature of the chi-square test. We will discuss the details of our methodological approach in the following section, but we acknowledge here that such tests do not provide any causal relationships between variables, and that our findings are to be understood as group level characteristics. All variables were checked for meeting assumptions of the chi-square test. As with many other studies using PIRUS and other databases, our work also suffers from missing data. The option of resolving the issue of missing data with mean imputation has been found to present a stronger relationship between variables than is accurate.<sup>55</sup> Due to the high risk involved in such data manipulation, we refrained from applying this method.

### **Descriptive statistics**

Of the 228 cases included in our analysis, 176 (77,2 percent) were inactive in terms of military service at the time of radicalization, indicating that extremist radicalization appears to predominantly occur after some time in the armed forces. The group containing individuals with active military service at the time of radicalization was 52 (22.8 percent). While the dataset does provide interesting nuances within the military group, there is still uncertainty related to military deployment. As [Table 2](#) shows, 48.2 percent of the cases are labeled as unknown in terms of military deployment. The 228 cases with military backgrounds were grouped into radicalization trajectories, leading to different ideological types of extremism ([Table 3](#)). The largest group, by a significant margin, is the far-right radicalization, accounting for 53.9 percent of all cases.

Since the number of cases from other ideological groups is so small, we focus on the far-right in our analysis. This of course reduces our sample size further but produces more stable analysis and enables us to present findings that are less influenced by mixed ideological groups.

### **Results**

A chi-square test of association was calculated, comparing the frequency of observed social and psychological risk factors among those with and without military experience in the far-right group. Effect sizes, as well as odds ratio for the observed risk factors in the military group, are provided in [Table 4](#). Interestingly, our analysis found several moderate effect sizes for traumatic experiences ( $\phi = 0,323$ , OR = 4,769); social standing diminution prior to radicalization ( $\phi = 0,232$ , OR = 3,531); difficulty finding or maintaining romantic relationships ( $\phi = 0,209$ , OR = 2,558); and social, cultural, religious, or political ostracism and marginalization ( $\phi = 0,245$ , OR = 3,202) in cases with a military background.<sup>56</sup> The odds ratio indicates a substantially heightened chance of the military group having the above risk factors, when compared to the group without a military background. Additionally, several weak effect sizes ( $\phi < 0,1$ ) were found, producing lower but still important odds ratios, in work history ( $\phi = 0,158$ , OR = 2,559), angry with the U.S. ( $\phi = 0,173$ , OR = 2,383), group grievance ( $\phi = 0,179$ , OR = 2,739) as well as a borderline weak association in mental illness ( $\phi = 0,099$ , OR = 1,752). Importantly, the work history variable indicates that the far-right military group was more likely to have stable employment, compared to the non-military far-right group. Having a stable employment can be beneficial to workers' mental health.<sup>57</sup>

Our analysis reveals a cocktail of heightened odds for risk factors within the far-right military group. These findings indicate that radicalized individuals with military backgrounds are more likely to suffer from trauma, mental illness, a decrease of social standing, and exclusion from participation in social groups or organizations. They are also more likely to be challenged with interpersonal problems, grievances, and anger toward society.

## Discussion

Our exploration of potential vulnerability factors for military personnel's increased risk of being attracted to or recruited into violent extremist milieus has found modest support for the mental health, grievance and social exclusion driven radicalization trajectories, which were suggested in the available literature initially discussed. Indeed, it appears that Simi et al.'s hypothesis of identity discrepancies following failed role adjustments within the military, or after transition into civilian life, might hold some empirical value, since the majority (77,2 percent) of the sample were retired from military duty when they radicalized. In general, many theories of radicalization that strongly focus on grievances,<sup>58</sup> mental health issues,<sup>59</sup> or ostracism,<sup>60</sup> as the driving factors appear to help explain the significance of these variables among our group of far-right military background cases. Naturally, military service, especially when it involves deployment to an active combat situation, includes numerous intense physical and psychological risks and strains. These could lead to prolonged mental health issues, such as PTSD. Even beyond psychological illness, Gøtzsche-Astrup<sup>61</sup> showed that fundamental uncertainty, loss of meaning, and the search for purpose regarding the most basic life questions have a strong empirical evidence basis in regard to their potential effect on extremist radicalization processes. Hence, it is fair to speculate that some of those armed service members that radicalize might have been thrown into existential uncertainty by their traumatic experiences, for example, during a combat situation. We also see that military background radicalization appears to involve significant social issues, which can easily be explained as a consequence of the associated traumatic experiences and mental health issues.

While we do not know if or how the military experience itself initiates a radicalization process, or how it could possibly contribute to such a trajectory, our findings resonate with the work by Simi et al.,<sup>62</sup> who propose that personal achievements within the military may go unrecognized, and even unappreciated, once back in civilian life. This may also be understood as a loss of significance, which Jasko et al.<sup>63</sup> found to be a positive predictor of ideologically motivated violence. Additionally, if exiting the armed forces was involuntary, this may increase mental health issues, lack of personal significance, and grievances toward one's own country. The already experienced process of becoming a soldier (martialization), belonging, identity building, and group solidarity<sup>64</sup> may create a larger vacuum in ex-soldiers' lives when compared to civilian radicalization cases. In addition, extremist milieus offer semi-martial or even pseudo-martial environments (e.g., militias, paramilitary structures, high affinity to weapons, violence, masculinity, militaristic language), which could appeal to veterans who feel lost in civilian life, as a familiar and easily navigated social sphere. Furthermore, extremist groups are known to be more appreciative of military experience (as this will be directly useful to them), and to offer status, respect, and recognition. Through dedicated subcultural and ideological references to warrior identities, death, and self-sacrifice, an extremist heroic doubling (not unlike in the military) could function as a bridge into military environments, and help recruit veterans. Our data and analysis do not provide concrete evidence for this aspect, of course, but we do see potential proxy indicators in the relevance of social variables. As shown, marginalization, ostracism, exclusion from social groups, on the one hand, and the decrease of social standing on the other, are theoretically linked to this dynamic, which may be used by extremist milieus for recruitment. Both, the group grievances and anger toward the U.S. variables were mentioned, and found to be marginally insignificant statistically. However, research by Belew<sup>65</sup> and Simi et al.<sup>66</sup> provide qualitative evidence and theoretical explanations for the potential impact of these factors. We also agree that the role transition process from military service to civilian life constitutes an extraordinary change in a person's life, which includes not only the fundamentally different day-to-day routines, but also the alteration of one's social environment, sense of purpose, belonging, and meaning. Hence, we argue not to dismiss these factors, even though they appear to be statistically insignificant.

Once again, we must caution against interpreting our results too widely. Clearly, not all far-right radicalized former or active soldiers are suffering from trauma, mental health issues or social exclusion. They are simply more likely than other radicalized groups to have these issues. Furthermore, we do not know at this point how the variables and vulnerability factors influence each other. We do know

that, among the far-right cases with military background, different radicalization trajectories do exist. As a group, however, we found modest empirical support that show stronger tendencies to be associated with the risk factors previously discussed.

Furthermore, we affirm that the group of extremists with military backgrounds are by themselves a diverse group and should be scrutinized much more thoroughly. Given the data's limitation, we were not able to advance more deeply into the potential psychological overlap between extremist and military milieus, as some scholars hypothesized in the past. Clearly, this field of research provides abundant future challenges, but also multiple highly valuable avenues to further an understanding of extremist radicalization trajectories.

Our exploratory study has produced some (albeit modest) empirical support for previous theories that attempted to explain extremist radicalization of military personnel. Future research must nevertheless investigate the distinct mechanisms and causal relationships between specific vulnerability factors and military experiences with regard to violent radicalization processes within specific extremist milieus. Our findings suggest a potentially moderating influence of the extremist ideology or milieu specific characteristics on the effects of some risk factors. The limitations we encountered while working with the PIRUS dataset could pave the way toward a possible future research agenda. By adding data collection on several points in time, as well as differentiated timestamps on the various factors in a dataset, such as the military history itself, or experiences of trauma and neglect in relation to a radicalization trajectory, as well as acts of extremists motivated violence, researchers would be able to explore the interplay between independent and dependent variables more accurately. Notwithstanding the importance of the PIRUS dataset, we encourage the development of a (ex-)military specific dataset that could build a stronger research foundation for future studies in the area. Specialized thematic terrorism and radicalization databases (e.g., the "Monterey Weapons of Mass Destruction" or the "Big, Allied and Dangerous" database) have shown to be valuable additions to other existing large-scale datasets. Using open sources, such as court documents or press reporting, may provide the necessary biographical data to generate such timestamps.

Further, we believe that the standardization among NATO countries regarding military training and structures, as well as socio-political similarities among liberal democracies, allow for a cautionary transfer of our findings to other national contexts. Of course, significant political, legal, cultural, and social differences, as well as the fundamentally different nature of far-right milieus in each country need to be accounted for. However, previous research has indicated that at least in some liberal democracies, comparable problems of far-right infiltration and radicalization within the military exist.<sup>67</sup> Another potential area where our findings might be of importance is far-right infiltration of police and law enforcement agencies. Naturally, despite the phenomenon of police militarization in some countries (especially the United States),<sup>68</sup> civilian law enforcement operates under vastly different legal and structural conditions. In addition, the experiences of law enforcement personnel regarding physical and psychological strain fall short of those of military personnel with combat duty, despite the challenges and threats faced by many police officers on a daily basis. Recruitment and training also differ substantially between the two groups. We believe, however, that our findings presented here could act as a starting point for similar exploratory studies in the law enforcement environment.

Even though our findings are but a modest step forward toward understanding military background radicalization, we believe that there is sufficient indication to direct preventative efforts, both within and without the armed services, for the mental health and social ostracism effects of military service, in relation to the potential risk of being recruited into extremist milieus. From the perspective of preventing and countering violent extremism (P/CVE), there is a need to help facilitate a better transition to civilian life, or more adequately, to deliver tailored treatment or support services to those in demand. Even beyond transition support for soldiers entering civilian life, our research has shown that radicalization during active service is a real danger to the integrity and security of militaries around the world. As has been argued previously,<sup>69</sup> the military should invest in their own P/CVE programs to actively counter the threat of extremist infiltration and exploitation for terrorist acts. Our work provides some baseline directions for those programs,

which may start with basic awareness training about the ideologies, codes, and symbols of certain extremist groups that are most attractive and inconspicuous to soldiers, but which could potentially reach full-fledged deradicalization activities. In addition, as was argued by Harris, Gringart, and Drake,<sup>70</sup> the similarity in disengaging from the military, as well as from extremist groups based on their shared ideological nature, does offer some theoretical foundation for transporting the state of the art in deradicalization and disengagement research, as well as in practice,<sup>71</sup> into the military realm and working with veterans.

## Conclusion

The research presented in this article contributes to the study of extremist radicalization of former or active members of the military by finding modest empirical support for various mechanisms suggested in the literature. Our findings indicate that far-right radicalized individuals with military backgrounds more frequently suffer from trauma, a diminution of social standing, having difficulties in maintaining romantic relationships, and an exclusion from participation in social groups or organizations compared to far-right radicalized individuals without a military background. In addition, mental illness, group grievance and anger toward the U.S. is more present, however weaker effect sizes and lower odds ratios, in the far-right military background group.

This aligns well with the existing (but predominantly theoretical) literature on the issue, which suggests more trauma, mental health and role transition related factors in military background radicalization trajectories. We also found marginal indication that grievances and anger against the U.S. might have a role to play in such processes. As a reminder, when reading our findings, it is necessary to bear in mind that the number of far-right cases with military backgrounds included in this research is limited ( $n = 123$ ). Also, we struggled with the issue of missing data. While our analysis offers valuable insight into the topic of extremist radicalization among (ex-) military personnel, more research is needed to reveal further insights—this includes the pathways in and out extremist beliefs and behavior for those with a military background. We believe that a more detailed dataset, with data collected on several points in time if possible, with timestamps for all variables, would facilitate such future work.

Furthermore, our work will be of interest to those who have been tasked with helping active service members and veterans with their issues, and especially their transition to civilian life. If the hypotheses underlying this work and our modest empirical evidence are shown to be valid in the future, psychological similarities between martialization and extremist radicalization on the one hand, and similar group level collective identity building processes on the other (e.g., by focusing on a warrior mentality), might provide the basis for the design of specific P/CVE programming that targets active and former military personnel. As indicated in previous research,<sup>72</sup> disengagement processes from the military and extremism are not fundamentally dissimilar. Hence, we are positive that the existing P/CVE knowledge and practical experience can successfully be translated into a military environment. Nevertheless, our research can only be the beginning of a much more detailed and elaborate exploration of this specific extremist radicalization trajectory. Since extremist and terrorist groups hold recruits with military skills in high value, there should be a strong interest in understanding the potential links and pathways between the two milieus better. This will help to identify the scope of the problem and create adequate counter measures. In the end, our work has provided a tiny (but potentially significant) additional piece of the puzzle that is extremist radicalization, and the danger posed by groups and ideologies in support of political violence.

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## Notes

1. Tom Dreisbach and Meg Anderson, “Nearly 1 In 5 Defendants In Capitol Riot Cases Served In The Military,” *National Public Radio*, January 21, 2021, <https://www.npr.org/2021/01/21/958915267/nearly-one-in-five-defendants-in-capitol-riot-cases-served-in-the-military>
2. Jason Slotkin, “Defense Secretary Lloyd Austin Signs Military ‘Stand Down’ Memo To Address Extremism,” *National Public Radio*, February 6, 2021, <https://www.npr.org/2021/02/06/964828770/defense-secretary-lloyd-austin-signs-military-stand-down-memo-to-address-extremi>
3. E.g., Ronan Farrow, “An Air Force Combat Veteran Breached the Senate,” *The New Yorker*, January 8, 2021, <https://www.newyorker.com/news/news-desk/an-air-force-combat-veteran-breached-the-senate>
4. Michael Biesecker, Jake Bleiberg and James Laporta, “Capitol rioters included highly trained ex-military and cops,” *Associated Press*, January 16, 2021, <https://apnews.com/article/ex-military-cops-us-capitol-riot-a1cb17201dfddc98291e9ead5badc257>.
5. Dan De Luce, “Pentagon report warns of threat from white supremacists inside the military,” *NBC News*, February 25, 2021, <https://www.nbcnews.com/news/military/pentagon-report-warns-threat-white-supremacists-inside-military-n1258871>.
6. David Chazan, “Dozens of Former French Soldiers Joined Jihadist Groups in Middle East, New Report Reveals,” *The Telegraph*, December 18, 2019, <https://www.telegraph.co.uk/news/2019/12/18/thirty-former-french-soldiers-joined-jihadist-groups-middle/>; Seth Jacobsen, “Radicalised Former Irish Soldier Detained in Syrian Camp—Report,” *The Guardian*, March 9, 2019, <https://www.theguardian.com/uk-news/2019/mar/09/radicalised-former-irish-soldier-detained-in-syrian-camp-report>; Ahmad Reme, “When Soldiers Get Radicalised,” *The Straits Times*, November 5, 2015, <https://www.straitstimes.com/asia/se-asia/when-soldiers-get-radicalised>.
7. Billy Kenber, “Nidal Hasan Sentenced to Death for Fort Hood Shooting Rampage,” *The Washington Post*, August 28, 2013, [https://www.washingtonpost.com/world/national-security/nidal-hasan-sentenced-to-death-for-fort-hood-shooting-rampage/2013/08/28/aad28de2-0ffa-11e3-bdf6-e4fc677d94a1\\_story.html](https://www.washingtonpost.com/world/national-security/nidal-hasan-sentenced-to-death-for-fort-hood-shooting-rampage/2013/08/28/aad28de2-0ffa-11e3-bdf6-e4fc677d94a1_story.html).
8. John Liebert, “No Legal Exit: The Fort Hood Shooter,” *Psychiatric Times*, October 9, 2013, <https://www.psychiatrictimes.com/couch-crisis/no-legal-exit-fort-hood-shooter>.
9. Katie Brenner and Adam Goldman, “F.B.I. Finds Links Between Pensacola Gunman and Al Qaeda—The New York Times,” May 18, 2020, <https://www.nytimes.com/2020/05/18/us/politics/justice-department-al-qaeda-florida-naval-base-shooting.html>.



10. BBC News, "US Expels 21 Saudi Military Cadets after Gun Attack," *BBC News*, January 13, 2020, sec. U.S. & Canada, <https://www.bbc.com/news/world-us-canada-51095771>.
11. U.S. Department of Justice, "U.S. Army Soldier Charged with Terrorism Offenses for Planning Deadly Ambush on Service Members in His Unit," June 22, 2020, <https://www.justice.gov/opa/pr/us-army-soldier-charged-terrorism-offenses-planning-deadly-ambush-service-members-his-unit>.
12. BBC News, "Germany's Elite Force 'to Be Partially Disbanded,'" *BBC News*, June 30, 2020, <https://www.bbc.com/news/world-europe-53237685>
13. Matthias Gebauer, Fidelius Schmid and Wolf Wiedmann-Schmidt, "Ermittler finden rechtsextremes Manifest bei Bundeswehrsoldaten," *Der Spiegel*, March 2, 2021, <https://www.spiegel.de/politik/deutschland/waffenfund-in-hessen-ermittler-finden-rechtsextremes-manifest-bei-soldaten-a-d2d783fa-7c9b-4a68-96ea-ce85472b26f0>.
14. For all these three cases, see: D. Koehler, "A Threat from Within? Exploring the Link between the Extreme Right and the Military," ICCT Policy Brief (September 2019). doi:10.19165/2019.2.06
15. L'essor, "Radicalisation: la Gendarmerie surveille désormais cinquante de ses personnels," *L'Essor*, June 27, 2020, <https://lessor.org/a-la-une/radicalisation-la-gendarmerie-surveille-desormais-cinquante-de-ses-personnels/>.
16. Jared Keller, "7 US Service Members Identified As Part Of White Nationalist Group Tied To 2017 Charlottesville Rally," *Task & Purpose*, March 18, 2019, <https://taskandpurpose.com/news/military-white-nationalist-groups-charlottesville>.
17. Tess Owen, "EXCLUSIVE: A U.S. Marine Used the Neo-Nazi Site Iron March to Recruit for a 'Racial Holy War,'" *VICE*, November 8, 2019, <https://www.vice.com/en/article/d3aq8a/exclusive-a-us-marine-used-the-neo-nazi-site-iron-march-to-recruit-for-a-race-war>.
18. Kyle Rempfer, "Infantryman Arrested for Allegedly Offering Bomb-Making Instructions to Target Politicians, Wanted to Fight in Ukraine with Far-Right Unit," *Army Times*, September 23, 2019, <https://www.armytimes.com/news/your-army/2019/09/23/infantryman-arrested-for-allegedly-offering-bomb-making-instructions-to-target-politicians-wanted-to-fight-in-ukraine-with-far-right-paramilitary-unit/>.
19. Leo Shane, "Signs of White Supremacy, Extremism up Again in Poll of Active-Duty Troops," *Military Times*, February 7, 2020, <https://www.militarytimes.com/news/pentagon-congress/2020/02/06/signs-of-white-supremacy-extremism-up-again-in-poll-of-active-duty-troops/>.
20. Pete Simi, Bryan F. Bubolz, and Ann Hardman, "Military Experience, Identity Discrepancies, and Far Right Terrorism: An Exploratory Analysis," *Studies in Conflict & Terrorism* 36, no. 8 (2013): 654–671, <https://doi.org/10.1080/1057610X.2013.802976>.
21. Brent L. Smith et al., "Right-Wing Extremism and Military Service," in *Terrorism Research and Analysis Project (TRAP) Volume I: A Collection of Research Ideas, Thoughts and Perspectives*, ed. A. Bringuel, J. C. Janowicz, A. C. Valida & E. F. Reid (Washington, DC: Government Printing Office, 2008), 345–68.
22. US Department of Homeland Security, "(U//FOUO) Rightwing Extremism: Current Economic and Political Climate Fueling Resurgence in Radicalization and Recruitment," Assessment (Washington, DC: US Department of Homeland Security, 2009), <https://doi.org/10.1037/e610232012-001>; Federal Bureau of Investigation, "White Supremacist Recruitment of Military Personnel Since 9-11" (Federal Bureau of Investigation, July 7, 2008).
23. Spencer Ackerman, "DHS Crushed This Analyst for Warning About Far-Right Terror," *Wired*, July 8, 2012, <https://www.wired.com/2012/08/dhs/>.
24. E.g., Michael Mann, "Were the Perpetrators of Genocide 'Ordinary Men' or 'Real Nazis'? Results from Fifteen Hundred Biographics," *Holocaust and Genocide Studies*, 14, no. 3 (2000), 331-366. Felix Römer, "Milieus in the Military: Soldierly Ethos, Nationalism and Conformism Among Workers in the Wehrmacht," *Journal of Contemporary History*, 48, no. 1 (2013), 125-149. Sonke Neitzel and Harald Welzer, *Soldaten-On Fighting, Killing and Dying: The Secret Second World War Tapes of German POWs* (London and New York: Simon and Schuster, 2012). Christopher Browning and Kevin Gallagher *Ordinary Men: Reserve Police Battalion 101 and the Final Solution in Poland* (New York: Harper Collins, 1993).
25. Bernd Greiner, *War without fronts: the USA in Vietnam* (London: Random House, 2010).
26. E.g., Sherie Mershon and Steven Schlossman, *Foxholes and Color Lines* (Baltimore, MD: The Johns Hopkins University Press, 1998).
27. E.g., James Griffith, "When Does Soldier Patriotism or Nationalism Matter? The Role of Transformational Small-Unit Leaders," *Journal of Applied Social Psychology* 40, no. 5 (2010).
28. E.g., Kent Jennings and Gregory Markus, "The Effect of Military Service on Political Attitudes: A Panel Study," *The American Political Science Review* 71, no. 1 (1977); E.M. Schreiber, "Authoritarian Attitudes in the United States Army," *Armed Forces & Society* 6, no. 1 (1979); Klaus Roghmann and Wolfgang Sodeur, "The Impact of Military Service on Authoritarian Attitudes: Evidence from West Germany," *American Journal of Sociology* 78, no. 2 (1972); Adelheid AM Nicol, Danielle Charbonneau, and Kathleen Boies, "Right-Wing Authoritarianism and Social Dominance Orientation in a Canadian Military Sample," *Military Psychology* 19, no. 4 (2007).
29. Edgar Jones, "The Psychology of Killing: The Combat Experience of British Soldiers during the First World War," *Journal of Contemporary History* 41, no. 2 (2006): 229–46, <https://doi.org/10.1177/0022009406062055>.
30. Simi, Bubolz, and Hardman, "Military Experience, Identity Discrepancies, and Far Right Terrorism," 654.
31. Kathleen Belew, *Bring the War Home: The White Power Movement and Paramilitary America* (Cambridge, Massachusetts: Harvard University Press, 2018).



32. Belew, p. 10.
33. Kevin D. Haggerty and Sandra M. Bucierius, "Radicalization as Martialization: Towards a Better Appreciation for the Progression to Violence," *Terrorism and Political Violence* 32, no. 4 (May 18, 2020): 768–88, <https://doi.org/10.1080/09546553.2017.1404455>.
34. Kira J. Harris, Eyal Gringart, and Deidre Drake, "Leaving Ideological Groups behind: A Model of Disengagement," *Behavioral Sciences of Terrorism and Political Aggression* 10, no. 2 (May 4, 2018): 91–109, <https://doi.org/10.1080/19434472.2017.1299782>.
35. Roger Griffin, "The Role of Heroic Doubling in Ideologically Motivated State and Terrorist Violence," *International Review of Psychiatry* 29, no. 4 (July 4, 2017): 355–61, <https://doi.org/10.1080/09540261.2017.1343528>.
36. Griffin, p. 358.
37. Scott Atran, "The Role of the Devoted Actor in War, Revolution and Terrorism," in *The Cambridge Companion to Religion and Terrorism*, ed. J. R. Lewis (New York: Cambridge University Press, 2017), 69–88.
38. Clara Pretus et al., "Neural and Behavioral Correlates of Sacred Values and Vulnerability to Violent Extremism," *Frontiers in Psychology* 9 (2018): 1–12, <https://doi.org/10.3389/fpsyg.2018.02462>.
39. Daniel Koehler, "Dying for the Cause? The Logic and Function of Ideologically Motivated Suicide, Martyrdom, and Self-Sacrifice within the Contemporary Extreme Right," *Behavioral Sciences of Terrorism and Political Aggression* (September 17, 2020): 1–22, <https://doi.org/10.1080/19434472.2020.1822426>.
40. See for example: C. Miller-Idriss, *The Extreme Gone Mainstream: Commercialization and Far Right Youth Culture in Germany* (Princeton, NJ: Princeton University Press, 2018); M. Gardell, *Gods of the Blood: The Pagan Revival and White Separatism* (Durham: Duke University Press, 2003).
41. Matteo Vergani et al., "The Three Ps of Radicalization: Push, Pull and Personal. A Systematic Scoping Review of the Scientific Evidence about Radicalization Into Violent Extremism," *Studies in Conflict & Terrorism* (September 10, 2018): 1–32, <https://doi.org/10.1080/1057610X.2018.1505686>; Michael H. Becker, "When Extremists Become Violent: Examining the Association Between Social Control, Social Learning, and Engagement in Violent Extremism," *Studies in Conflict & Terrorism* (June 11, 2019): 1–21, <https://doi.org/10.1080/1057610X.2019.1626093>.
42. Vergani et al., "The Three Ps of Radicalization."
43. Oluf Gøtzsche-Astrup, "The Time for Causal Designs: Review and Evaluation of Empirical Support for Mechanisms of Political Radicalisation," *Aggression and Violent Behavior* 39 (March 2018): 90–99, <https://doi.org/10.1016/j.avb.2018.02.003>.
44. Daniel Koehler, "Violent Extremism, Mental Health and Substance Abuse among Adolescents: Towards a Trauma Psychological Perspective on Violent Radicalization and Deradicalization," *The Journal of Forensic Psychiatry & Psychology* 31, no. 3 (May 3, 2020): 455–72, <https://doi.org/10.1080/14789949.2020.1758752>; Manon Prats, Sophie Raymond, and Ivan Gasman, "Religious Radicalization and Lone-Actor Terrorism: A Matter for Psychiatry?" *Journal of Forensic Sciences* 64, no. 4 (2019): 1253–58, <https://doi.org/10.1111/1556-4029.13992>; Błażej Misiak et al., "A Systematic Review on the Relationship between Mental Health, Radicalization and Mass Violence," *European Psychiatry* 56, no. 1 (February 2019): 51–59, <https://doi.org/10.1016/j.eurpsy.2018.11.005>; Oluf Gøtzsche-Astrup and Lasse Lindeskilde, "Either or? Reconciling Findings on Mental Health and Extremism Using a Dimensional Rather than Categorical Paradigm," *Journal of Forensic Sciences* 64, no. 4 (2019): 982–88, <https://doi.org/10.1111/1556-4029.14014>.
45. Paul Gill et al., "Systematic Review of Mental Health Problems and Violent Extremism," *The Journal of Forensic Psychiatry & Psychology* (September 19, 2020): 1–28, <https://doi.org/10.1080/14789949.2020.1820067>.
46. Lindsey A. Hines et al., "Posttraumatic Stress Disorder Post Iraq and Afghanistan: Prevalence among Military Subgroups," *Canadian Journal of Psychiatry. Revue Canadienne De Psychiatrie* 59, no. 9 (September 2014): 468–79, <https://doi.org/10.1177/070674371405900903>.
47. Zainab Al-Attar, "Severe Mental Disorder and Terrorism: When Psychosis, PTSD and Addictions Become a Vulnerability," *The Journal of Forensic Psychiatry & Psychology* (October 20, 2020): 1–21, <https://doi.org/10.1080/14789949.2020.1812696>.
48. Gill et al., "Systematic Review of Mental Health Problems and Violent Extremism."
49. Gøtzsche-Astrup, "The Time for Causal Designs."
50. National Consortium for the Study of Terrorism and Responses to Terrorism (START), "Profiles of Individual Radicalization in the United States [Data File]" (National Consortium for the Study of Terrorism and Responses to Terrorism (START), 2018), <http://www.start.umd.edu/pirus>.
51. National Consortium for the Study of Terrorism and Responses to Terrorism, "Profiles of Individual Radicalization in the United States (PIRUS) Codebook. Public Release Version" (University of Maryland: National Consortium for the Study of Terrorism and Responses to Terrorism, 2018), 5
52. National Consortium for the Study of Terrorism and Responses to Terrorism, "Profiles of Individual Radicalization in the United States (PIRUS) Codebook. Public Release Version"

53. Daniel Bergh, "Chi-Squared Test of Fit and Sample Size-A Comparison between a Random Sample Approach and a Chi-Square Value Adjustment Method," *Journal of Applied Measurement* 16, no. 2 (2015): 204-17; Julie Pallant, *SPSS Survival Manual*, 6th ed. (Berkshire, England: Open University Press, 2016).
54. National Consortium for the Study of Terrorism and Responses to Terrorism (START), "Profiles of Individual Radicalization in the United States [Data File]."
55. Joost R. van Ginkel et al., "Rebutting Existing Misconceptions About Multiple Imputation as a Method for Handling Missing Data," *Journal of Personality Assessment* 102, no. 3 (May 3, 2020): 297-308, <https://doi.org/10.1080/00223891.2018.1530680>; Karen Grace-Martin, "The First Problem with Mean Imputation," *The Analysis Factor*, 2020, <https://www.theanalysisfactor.com/mean-imputation/>.
56. Louis M Rea and Richard A. Parker, *Designing and Conducting Survey Research. A Comprehensive Guide*, 4th ed. (San Francisco, CA: Jossey-Bass, 2014).
57. Matthew Modini et al., "The Mental Health Benefits of Employment: Results of a Systematic Meta-Review," *Australasian Psychiatry* 24, no. 4 (August 2016): 336, <https://doi.org/10.1177/1039856215618523>.
58. Ahmed Ajil, "Politico-Ideological Violence: Zooming in on Grievances," *European Journal of Criminology*, January 21, 2020, <https://doi.org/10.1177/1477370819896223>.
59. Gill et al., "Systematic Review of Mental Health Problems and Violent Extremism"; Anselm Rink and Kunaal Sharma, "The Determinants of Religious Radicalization: Evidence from Kenya," *Journal of Conflict Resolution* 62, no. 6 (July 2018): 1229-61, <https://doi.org/10.1177/0022002716678986>.
60. Michaela Pfundmair, "Ostracism Promotes a Terroristic Mindset," *Behavioral Sciences of Terrorism and Political Aggression* 11, no. 2 (May 4, 2019): 134-48, <https://doi.org/10.1080/19434472.2018.1443965>.
61. Gøtzsche-Astrup, "The Time for Causal Designs," 94.
62. Simi, Bubolz, and Hardman, "Military Experience, Identity Discrepancies, and Far Right Terrorism."
63. Katarzyna Jasko, Gary LaFree, and Arie Kruglanski, "Quest for Significance and Violent Extremism: The Case of Domestic Radicalization," *Political Psychology* 38, no. 5 (October 2017): 815-31, <https://doi.org/10.1111/pops.12376>.
64. Haggerty and Bucerius, "Radicalization as Martialization."
65. Belew, *Bring the War Home*.
66. Simi, Bubolz, and Hardman, "Military Experience, Identity Discrepancies, and Far Right Terrorism."
67. Daniel Koehler, *A Threat from Within?*
68. E.g., Sam Bieler, "Police Militarization in the USA: The State of the Field," *Policing: An International Journal of Police Strategies & Management* 39, no. 4: 586-600.
69. Daniel Koehler, *A Threat from Within?* 34
70. Harris, Gringart, and Drake, "Leaving Ideological Groups Behind."
71. See for example D. Koehler, *Understanding Deradicalization. Methods, Tools and Programs for Countering Violent Extremism* (Oxon/New York: Routledge, 2016); S. V. Marsden, *Reintegrating Extremists. Deradicalisation and Desistance* (London: Palgrave Macmillan, 2017); D. Koehler, "Violent extremism, mental health and substance abuse among adolescents: towards a trauma psychological perspective on violent radicalization and deradicalization," *The Journal of Forensic Psychiatry and Psychology* 31, no. 3 (2020): 455-472. doi: 10.1080/14789949.2020.1758752. D., Koehler and V.Fiebig, "Knowing What to Do: Academic and Practitioner Understanding of How to Counter Violent Radicalization," *Perspectives on Terrorism* 13, no. 3 (2019): 44-62; K. Barrelle, "Pro-integration: Disengagement From and Life After Extremism," *Behavioral Sciences of Terrorism and Political Aggression* 7, no. 2 (2015): 129-142. doi:10.1080/19434472.2014.988165; A. Dalgaard-Nielsen, "Promoting Exit from Violent Extremism: Themes and Approaches," *Studies in Conflict & Terrorism* 36, no. 2 (2013): 99-115. doi:10.1080/1057610x.2013.747073
72. Harris, Gringart, and Drake, "Leaving Ideological Groups Behind."