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Why They Leave: An Analysis of Terrorist Disengagement Events from Eighty-seven Autobiographical Accounts

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ABSTRACT
A deeper understanding of terrorist disengagement offers important insights for policymakers and practitioners seeking to persuade individuals to leave these groups. Current research highlights the importance of certain “push” and “pull” factors in explaining disengagement. However, such studies tell us very little about the relative frequencies at which these hypothesized factors are associated with leaving in the terrorist population. Using data collected from eighty-seven autobiographical accounts, we find that push, rather than pull, factors are more commonly cited as playing a large role in individuals’ disengagement decisions and that the experience of certain push factors increases the probability an individual will choose to leave. Importantly, disillusionment with the group’s strategy or actions, disagreements with group leaders or members, dissatisfaction with one’s day-to-day tasks, and burnout are more often reported as driving disengagement decisions than de-radicalization. Finally, our results suggest that ideological commitment may moderate one’s susceptibility to pull factors.

I took the tram into the city center and walked towards the consulate. My stomach told me this was the right thing, the only thing, to do. And yet I felt awful and heavy with guilt. I thought about Hakim, about how as a child he had given me money for candy. I thought about the Uzis. I thought about the 1.6 billion Muslims around the world who felt humiliated by the failure of the Muslim world and the arrogance of the West. I thought about all these things because I felt them deeply, and knew that Hakim, Amin, Yasin, and Tarek all felt them deeply as well. So I didn’t blame them for who they were, or for what they were doing. But I needed to protect my family and myself, and I had run out of options.

—Omar Nasiri on leaving the Groupe Islamique Armé (GIA)

With thousands of foreign fighters flocking to join the Islamic State of Iraq and the Levant (ISIL), there is increased interest in uncovering what causes individuals to join a terrorist group. Yet, an equally important and often understudied
question is why these individuals might choose to abandon the groups they had sought so eagerly to join. A deeper understanding of the factors that contribute to terrorist disengagement offers important insights for policymakers and practitioners seeking to persuade individuals to leave these groups. It also sheds light on what types of policies or counter-messaging campaigns might be most effective at dissuading individuals from becoming involved in the first place.2

The decision to disengage from terrorism is complex and highly individualized.3 According to Omar Nasiri (quoted above), he left the GIA and cooperated with French authorities because members of the terrorist organization had been storing weapons and cash at his mother’s home, endangering her and her children’s safety. Members of the organization, including his brother, were also plotting to kill him for stealing. Other individuals, however, cite different reasons for leaving terrorism behind, including disagreements with leaders or group members, disillusionment with the group’s strategy or actions, the desire or need to dedicate more time to one’s family, or a loss of faith in the group’s ideology.4

Existing research highlights certain “push” and “pull” factors in explaining individuals’ decisions to disengage from terrorism.5 Push factors are experiences related to one’s involvement in terrorism that drive him or her away and include burnout, difficulty living a clandestine lifestyle, loss of faith in the ideology, and disagreements with leaders or group members. Pull factors are influences outside the group that attract one to a more traditional social role, such as the desire to marry and have a family, the demands of a conventional career, and the promise of amnesty or material rewards. While previous studies have helped unearth potential push/pull factors for disengagement, they rely on interview data obtained from a relatively small sample of individuals or individuals from the same terrorist group or region. This makes it difficult to ascertain how often certain push and pull factors play a role (large or small) in terrorists’ decisions to leave. The absence of such data is not surprising given the difficulties associated with studying clandestine populations like terrorists or former

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3 Ibid., 139.
terrorists. Given that many of these individuals wish to remain undetected, accurate estimates of the true population, random sampling, and large-scale surveys prove impossible.⁶

Despite these methodological challenges, uncovering whether certain push or pull factors are more commonly cited as causes for leaving is critical to a more comprehensive understanding of terrorist disengagement and has important implications for counterterrorism policy. Certain types of interventions, for instance, may be more effective at persuading individuals to disengage, and certain types of groups may be more prone to losing members. We therefore take a unique approach to the study of terrorist disengagement through an analysis of data on forty-nine events of individual voluntary disengagement collected from eighty-seven autobiographies written by terrorists and former terrorists. Similar to Ben Oppenheim, Abbey Steele, Juan F. Vargas, and Michael Weintraub’s work on ex-combatants, we compare our findings for these cases with a control group of fifty-four events of individual involuntarily disengagement (most often as a result of imprisonment) in which the individual subsequently re-engaged, based upon the premise that he or she would have remained engaged in terrorism had the involuntary disengagement not occurred.⁷

Our findings suggest that the experience of push rather than pull factors—especially disillusionment with the group’s strategy or actions, disagreements with group leaders or members, disappointment with day-to-day tasks, and burnout—increase the likelihood terrorists will choose to leave and are more frequently reported as playing a large role in their exit decisions. Further, our findings indicate that a loss of faith in the ideology underpinning terrorist behavior (or “de-radicalization”) is not one of the most commonly cited causes for disengagement, nor a prerequisite. Finally, our results suggest one’s susceptibility to pull factors may be mitigated by level of ideological commitment.

Literature and Hypotheses

Scholars have classified disengagement from terrorism along two dimensions. The first indicates whether the disengagement occurred solely at the individual level or was the result of a collective, group level endeavor.⁸ The second encompasses whether the disengagement was voluntary or involuntary (for example, imprisonment or expulsion for individuals; defeat for groups). Our research focuses on uncovering the causes of individual, voluntary

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disengagement from terrorism. The reasons why entire terrorist groups lay down their arms, disintegrate or disband have been studied at length and the causes of involuntary, individual disengagement are relatively straightforward and often beyond the terrorist’s control.9

Although there is no single reason why terrorists choose to disengage, researchers have, building off the literature on disaffiliation from new religious movements (NRMs), organized a list of potentially important factors into the push/pull framework described above.10 In a recent review of the literature, Mary Beth Altier, Christian Thoroughgood, and John Horgan identified and described a list of push and pull factors (Table 1) cited across existing studies of terrorist disengagement.11

They maintain that although the push/pull framework provides a useful heuristic for describing the factors that may cause terrorists to disengage, it is underdeveloped for modeling the disengagement process and lacks predictive value.12 Some terrorists may experience one or a combination of push/pull factors and never disengage, while others explicitly cite the same factor(s) as reasons for leaving.13 Further, as argued here, due to the absence of large-n studies of disengagement across a range of terrorist groups and/or regions, there is no evidence as to which push/pull factors are more likely to precipitate disengagement, on average, in the terrorist population.

Drawing upon a review of the literature on terrorist disengagement, criminal desistance, disaffiliation from New Religious Movements (NRMs), and workplace turnover from industrial and organizational psychology, Altier et al. proposed that Caryl E. Rusbult and colleagues’ investment model from social psychology provides a more comprehensive framework for understanding individual exit decisions across a range of social roles, including the terrorist role.14 The investment model posits that one’s commitment to a given social role or organization (or likelihood of exit) is a function of the satisfaction derived from involvement, the alternatives available, and the investments (or sunk costs) incurred according to the

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10 Bjørgo, *Racist and Right-Wing Violence*; Bjørgo, “Processes of Disengagement.”


12 Ibid., 650.

13 Ibid., 650.

The following formula:\textsuperscript{15}

\[
\text{Commitment} = \text{Satisfaction} - \text{Alternatives} + \text{Investments};
\]

where Satisfaction \( = \text{Actual(Reawrds} - \text{Costs)} - \text{Expected(Reawrds} - \text{Costs).} \)

Importantly, satisfaction is a function of one’s actual net gains relative to the expected net gains from involvement.

The investment model improves upon the push/pull framework because it allows us to understand why certain pushes or pulls may cause some terrorists but not others to disengage, based upon their individualized levels of satisfaction with involvement, available alternatives, and investments.\textsuperscript{16} Further, the model allows for a more dynamic approach by accounting for the fact that certain pushes and pulls may prompt disengagement for a given individual when introduced at certain points in time but not others.\textsuperscript{17}

Despite the noted issues with the push/pull framework, it would still be useful to know whether certain push or pull factors are more likely to explain terrorists’ exit decisions. This is not to say that push and pull factors will alter each individual’s decision calculus in exactly the same way, but it may be true that certain push or pull factors are more likely to be experienced by terrorists, to have on average a more deleterious effect on one’s level of satisfaction, or to increase the alternatives available. Even though disengagement is a highly individualized process, certain pushes or pulls may be more common in precipitating disengagement. Identifying these particular push and pull factors would help to determine whether or not certain interventions may be more or less effective at encouraging terrorists to disengage as well as whether groups with certain characteristics, certain types of recruits, or operating in certain contexts are more susceptible to shedding their members.

To date, few studies examine the relative importance of specific push/pull factors and most tend to focus on a single terrorist group or region. Michael Jacobson’s secondary research on former al Qaeda (AQ) members reports disillusionment with the group’s strategy or tactics, lack of respect for group leaders, and

\begin{table}[h]
\centering
\caption{Hypothesized push/pull factors for terrorist disengagement.}
\begin{tabular}{l|l}
\hline
\textbf{Push Factors} & \textbf{Pull Factors} \\
\hline
Unmet expectations & Competing loyalties \\
Disillusionment with strategy/actions of terrorist group & Positive interactions with moderates \\
Disillusionment with personnel & Employment/educational demands or opportunities \\
Difficulty adapting to clandestine lifestyle & Desire to marry/establish a family or family demands \\
Inability to cope with physiological/psychological effects of violence & Financial incentives \\
Loss of faith in ideology & Amnesty \\
Burnout & \\
\hline
\end{tabular}
\end{table}


\textsuperscript{16}Altier et al., “Turning Away.”

\textsuperscript{17}Ibid.
disagreements over money as reasons for leaving. However, Jacobson also cites the importance of pro-social ties, noting that members who maintained contact with family and friends outside the organization were more likely to leave. Shazadi Beg and Laila Bokhari’s interviews with former militants in Pakistan similarly noted the importance of the “practical aspects of finding alternative livelihoods” and “changing priorities,” including the importance of marriage and children. Donatella Della Porta’s study of life histories of former members of the Italian Red Brigades highlights the importance of internal group tensions, burnout, and social relationships with individuals outside the group in explaining exit decisions. Fernando Reinares analysis of testimonies from thirty-five individuals who voluntarily left the group Euskadi Ta Askatasuna (ETA) (militarra) between the years 1970 and 2000 suggests—similarly to Rogelio Alonso’s study of former ETA (político-militar) militants—that decisions to disengage up until the year 1980 were largely the result of structural changes, mainly territorial decentralization and democratization, which alleviated underlying grievances and the rationale for violence, respectively. According to Reinares, these factors also reduced popular support for the cause and the social prestige associated with membership. He attributes the causes of disengagement from the 1980s through 2000 largely to disillusionment with certain violent attacks carried out by ETA as well as dissatisfaction with the group’s internal functioning. He notes, however, that others in his sample left for quite personal reasons, including the desire to spend time with one’s family or raise children, the monotony of the terrorist lifestyle, and the fear or stress associated with carrying out attacks. Alonso similarly records difficulty adapting to the clandestine lifestyle, weariness, religious conversion, and personal commitments including marriage, children, work, and military service as reasons for leaving ETA during this period.

More recently, Kate Barrelle (2015) conducted an interview-based study of twenty-two former extremists in Australia (fourteen belonging to violent groups including Tamil separatists, jihadists, and far-right extremists, and eight to non-violent radical environmentalist groups) and offered more systematized data. Barrelle computes a per-person weighted average with three points allocated for one’s primary reason for leaving, two points for the secondary reason, and one

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19Ibid.
21Della Porta, “Leaving Underground Organizations.”
23Reinares, “Exit from Terrorism.”
24Ibid.
25Ibid.
26Alonso, “Why Do Terrorists Stop?”
27Barrelle, “Pro-integration.”
point for the tertiary.28 Using this measure, Barrelle found that disillusionment with the group’s leaders was the most common reason for leaving (30%), followed by disillusionment with members (25%), and burnout (19%). Other factors reported include the toll of carrying out excessive violence (16%), disillusionment with radical ideas (10%), the belief radical methods are ineffective (10%), the pull of other roles (10%), and not feeling like one belongs (8%).29 Barrelle’s sample further includes cases in which the individual was forced out by arrest or defeat (9%) or forced to leave by the group (6%).30

Barrelle’s findings are consistent with Emma Disley et al.’s review of the literature, which concluded that disillusionment is the “factor most commonly cited in the literature as being associated with disengagement from all types of terrorism.”31 It also supports earlier claims made by Frankje Demant et al., and to some extent Alonso, that push factors and disillusionment play an important role in the terrorist disengagement process early on with pull factors such as amnesty, financial incentives, and the allure of new roles playing a potentially critical role once an individual is already disillusioned.32 These claims are echoed in David Bromley and Stuart Wright’s work on disaffiliation from NRMs, which found dissatisfaction played an important role early in the disaffiliation process, with outside influences mattering later.33 They are also supported by Helen Ebaugh’s sociological work on voluntary role exit, which suggests that once individuals have doubts about their current social role, they “try on” and evaluate new roles in a process she terms “anticipatory socialization.”34 Finally, the results are consistent with Rusbult’s model, which indicates commitment is not only a function of the satisfaction obtained from involvement, but also the alternatives available.35

Taken together, these findings for particular groups (AQ, ETA, and the Red Brigades) and particular regions (Australia, Pakistan) are somewhat mixed, with some studies highlighting the importance of certain pushes and others emphasizing certain pulls.36 Moreover, with the exception of the early years of ETA (during

28Ibid.
29Ibid.
30Ibid.
32Frankje Demant et al., Decline and Disengagement: An Analysis of Deradicalisation (Amsterdam: Institute for Migration and Ethnic Studies, 2008); Alonso, “Why Do Terrorists Stop?” Alonso (2011) cites only social reinsertion measures (for example, amnesty, financial incentives).
35Rusbult, “Longitudinal Test.”
36Studies that emphasize pushes include Barrelle, “Pro-integration,” and Reinaries, “Exit from Terrorism.” Studies that emphasize pulls include Jacobson, “Why Terrorists Quit” and Beg and Bokhari, “Pakistan.”

which clear structural changes likely caused individuals to re-evaluate their grievances as well as the necessity of violence), a loss of faith in the ideology does not appear to be a frequent cause of disengagement in these studies. The literature therefore runs counter to notions that we need to de-radicalize terrorists in order for them to disengage.\textsuperscript{37}

The possibility that push, rather than pull, factors are more common in driving disengagement decisions in the context of terrorism is important not only because of the policy implications, but because the finding is somewhat incongruent with the literature on criminal desistance. Aside from an age-related burnout phenomenon, the literature emphasizes the importance of pro-social bonds,\textsuperscript{38} which are akin to pulls and are meaningful attachments to conventional others or opportunities (such as a marriage or a career) that encourage former criminals to conform to social norms. However, most criminals are not ideologically motivated in their behavior, and this might suggest the role ideology plays in increasing commitment to NRM\textemdash and terrorist organizations through affective and normative bonds.\textsuperscript{39} Such bonds increase the satisfaction one obtains from involvement, making exit less likely even if pull factors are experienced. Thus, it may be that individuals’ susceptibility to pull factors is mitigated by their level of ideological commitment.

Drawing upon a sample of ideologically and geographically diverse cases of disengagement gleaned from eighty-seven autobiographies, we investigate the frequency with which certain push and pull factors were experienced prior to individuals’ exit decisions and whether they were reported to play a role in that decision. Based upon our review of the literature, we test the following hypotheses:

Hypothesis 1 (H\textsubscript{1}). Push factors more commonly explain individuals’ decisions to leave a terrorist organization.

Hypothesis 2 (H\textsubscript{2}). De-radicalization, while an important push factor for some individuals, is not the leading cause of terrorist disengagement or a necessary pre-requisite.


Hypothesis 3 (H₃). Individuals’ susceptibility to pull factors is moderated by level of ideological commitment (with those less committed more susceptible).

**Methodological Approach**

**Population and Key Terms**

Our population consists of individuals who become involved or engaged in a terrorist group. We do not include lone-actor terrorists because we suspect the decision to depart a terrorist group (or any social group) may be influenced by different factors (for example, social bonds, affective ties) than the decision to cease one’s unilateral involvement in terrorism (or any behavior). Further, research suggests lone actors differ in important ways (such as prevalence of mental illness) from those who join a terrorist group. Individuals in our sample need not be official members of a terrorist group, because in many cases membership is informally understood rather than formally sanctioned. They simply must be actively and knowingly involved in a group engaged in terrorist activity. We adopt the Department of Defense’s definition of *terrorist activity* as “the calculated use of unlawful violence or threat of unlawful violence to inculcate fear, intended to coerce or to intimidate governments or societies in the pursuit of goals that are generally political, religious, or ideological.” We therefore include the bomb maker, the lookout, intelligence operatives, weapons procurers, those responsible for propaganda, and other support staff associated with the group in addition to individuals who plant a bomb or pull a trigger. This definition, however, excludes those who are not directly involved in the group, but are supporters. Individuals involved in terrorist groups on behalf of an international or domestic security agency are also included in the analysis, because they face many of the same push and pull factors associated with leaving. They represent just 16% of cases of individual voluntary disengagement, and our results are robust to their exclusion.

As individuals may become involved and uninvolved in different terrorist groups over their life course, we further define an *engagement event* as a period of sustained involvement in a terrorist group. A *disengagement event* is a sustained period of time in which the individual remains uninvolved in a terrorist group following a period of involvement, but would not include short reprieves in activity.

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40 We do not distinguish between involvement and engagement as in John Horgan, *The Psychology of Terrorism* (New York: Routledge, 2014), but use these terms interchangeably and in the colloquial sense. Thus, our definition of engagement in terrorism would include Horgan’s notions of both engagement and involvement.


43 See Section 5 of the Supplemental Online Appendix.
due to, for example, illness or a lull in fighting. A re-engagement event is a period of renewed involvement with either the same terrorist group or a different entity, after a period of disengagement.

**Data Collection and Sample**

To collect data on the relative importance of push/pull factors in explaining disengagement decisions, we turned to English-language autobiographies written by individuals involved in terrorism. We did not include short public statements or interviews, as the brevity of these communications means they are unlikely to contain information on a significant number of variables important for our analysis. We further excluded texts that are not traditional autobiographies in that the majority of the text is written by a co-author or a ghostwriter (for example, Gerry Bradley & Brian Feeney, *Insider: Gerry Bradley’s Life in the IRA*), as well as those for which there are serious and corroborated doubts about the claimed involvement in terrorism (such as Walid Shoebat, *Why I Left Jihad*). Our search yielded eighty-seven autobiographies published between the years 1912 and 2011, which represent the lives of eighty-five unique terrorists. Our sample lends insight into members of a diverse set of forty-two terrorist groups including religious groups (such as AQ, Taliban), extreme left-wing groups (such as the Weather Underground), extreme right-wing groups (such as Red Brigades, Ku Klux Klan [KKK]), nationalist/separatist groups (such as Provisional Irish Republican Army [PIRA], Hamas, Front de Libération du Québec, African National Congress [ANC]), and those motivated by a single issue (such as Army of God). Figure 1 depicts the distribution of our sample by group type.

Once we obtained copies of the autobiographies, we devised a questionnaire to gather relevant text. The questionnaire consists of sixty questions divided into nine sections, which gather relevant background information and then follow the trajectory of the individuals’ involvement in terrorism. The first sections focus on bibliographical information and the individuals’ socio-demographic characteristics, childhood experiences, and beliefs prior to their first engagement in a terrorist group. The next sections are specific to each engagement event within the terrorists’ life and cover the group(s) they joined, how they became involved, and their experiences while involved. The questionnaire then solicits text about whether,
how, and why they disengaged and whether, how, and why they re-engaged for each unique engagement event.

To collect data for quantitative analysis, we devised a codebook consisting of 165 variables and a numeric coding sheet. As the purpose of the study is to investigate the potential causes of disengagement, the codebook and resulting dataset are arranged by engagement event, rather than by autobiography or individual terrorist. Thus, one observation represents a period of engagement in terrorist activity during an individual’s life course. It includes data on key variables associated with that particular engagement as well as whether, how, and why the individual disengaged and whether, how, and why he or she chose to re-engage. Re-engagements then represent subsequent engagement events.

Each questionnaire was filled out and coded by at least two, and in the majority of cases three, trained individuals. The questionnaires and coding sheets were then subjected to a reconciliation process. For the questionnaires, this was a straightforward process of creating a combined master questionnaire for each autobiography using all relevant quotations from the original questionnaires. If a discrepancy was found between coding sheets, a meeting was held with all relevant coders to reach an evidence-based consensus using the author’s original text from the questionnaire as to how the variable should be coded. Most discrepancies could be attributed to a particular coder missing a relevant quotation.

The eighty-seven autobiographies yielded 185 unique engagement events. Thirty-three of the eighty-five individuals in our sample (39%) engaged in terrorism only once and the average number of engagement events per individual is two. Of the 185 engagement events, 92% (or 170) were followed by a period of disengagement. In the remaining 8% (or fifteen cases), the autobiography

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47 When terrorists wrote more than one autobiography, the information from each was collected on a separate questionnaire and then combined to create a unified picture of that individual’s life for the purpose of coding engagement events.

48 See Table A2 in the Supplemental Online Appendix for the distribution of engagement events by groups.
ends with the individual still engaged in terrorism. Although the individual may have been disengaged while authoring the account, we exclude these engagements as the data are censored, and we lack detailed information about the individual’s departure.\(^49\)

**Advantages and Limitations**

There are several advantages to utilizing autobiographical accounts to analyze the causes of terrorist disengagement. First, systematic analysis offers unique insight into the psychology of terrorists, including their decision-making processes, as well as the inner workings of a variety of terrorist groups—issues that are difficult to study using traditional research methodologies.\(^50\) Second, unlike interviews, surveys, and ethnographic fieldwork, the method is unobtrusive and eliminates the participants’ ability to react (consciously and unconsciously) to the researcher or research design, which might influence the data they provide. Finally, unlike most survey and interview research—which tends to collect data at a single point in time or within a limited window of time—detailed autobiographical data allow researchers to examine the social-psychological processes and experiences underlying a particular phenomenon over an extended period of time.\(^51\)

Nevertheless, the use of autobiographical data and this sampling technique presents some potential limitations. First, only English-language autobiographies are included. We do not believe this restriction to be especially problematic, as the list of terrorist memoirs generated by Jacob N. Shapiro and David A. Siegel, which sought to include English, French and Spanish sources, yielded very few Spanish (five) and no French sources.\(^52\) Shapiro’s expanded list of 108 memoirs also included few foreign language sources (six Spanish, four French, three German, one Japanese, one Norwegian).\(^53\) Further, Shapiro and Siegel located no Arabic-language sources that met their inclusion criteria.\(^54\) Moreover, Figure 2 reveals that the terrorists in our sample come from all regions.\(^55\)

A second potential limitation is that nearly all of the terrorists in our sample disengaged prior to writing their autobiography. Only Giorgio’s *Memoirs of an Italian Terrorist* was written while the author was still involved. Ultimately, we would like a

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\(^{49}\) We chose not to include these individuals in our control group because we view their associated data as censored, meaning we have no information as to whether they disengaged soon after their book ends. Since disengagement is a long process for some, we think it would be incorrect to treat these individuals as though they were as committed to the group as those who involuntarily disengaged and then chose to re-engage.


\(^{51}\) Altier et al., “In Their Own Words?”

\(^{52}\) Shapiro and Siegel, “Moral Hazard.”


\(^{54}\) Shapiro, *The Terrorist’s Dilemma*; Shapiro and Siegel, “Moral Hazard.”

\(^{55}\) As Russia lies in both Asia and Europe, we categorize it separately.
A sample of engaged terrorists for use as a control group to see whether or not the potential causes of disengagement were more likely to be present for those who left the group than those who remained. This issue is addressed in two ways. First, the rich autobiographical data (for the most part) reports in detail what caused individuals to leave. Therefore, coded in the data is both whether the subject was experiencing a hypothesized push or pull factor during an engagement event as well as whether he or she cited the factor as playing a large or small role in the decision to exit. This helps us assess whether certain push/pull factors were not only present, but causal. Second, logistic regression analysis is used to investigate the effect of the experience of a push/pull (whether it was reported to play a role in disengagement or not) on the likelihood that one chooses to leave. This measure provides a more objective test not subject to potential author bias in the reasons given for leaving.

A third potential limitation is that the individuals in our sample seem to be disproportionately drawn from groups that collectively disengaged—such as PIRA, ANC, Mau Mau, Irish Republican Army (IRA), and the Weather Underground—and many of these groups entered normal politics. The fact that members of such groups are more likely to write their memoirs is not surprising. Given that still-engaged terrorists are less likely to write autobiographies, there is likely a larger base of disengaged terrorists among groups that have collectively laid down their arms. Also, since the violent conflict is for all intents and purposes over, the publishing of an autobiography poses less of a security threat to the group and terrorist involved. Nevertheless, we found that collective disengagements accounted for just 22% of all disengagement events (see Table 2) in our sample.

Finally, there may be something systematically different about individuals who write an autobiography. Perhaps they are more likely to experience guilt, regret, or pride and feel compelled to convey some public message about their involvement.

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56 See Table A1 in the Supplemental Online Appendix.
Some may wish to reap financial rewards or increased notoriety. The accounts may be biased if the individuals possess ulterior motivations to legitimize, justify, and record their participation in terrorism or to present their involvement in a certain light. The narratives are also subject to hindsight or retrospective bias. All of these shortcomings, however, are also true of interviews. Our findings are only valid to the extent that those in our sample are providing a truthful account of their involvement and the reasons behind their leaving. Further, authors or editors may have omitted important details on variables of interest, leading researchers to assume a factor wasn’t important when, in fact, it was. With regards to this study, if a push/pull factor is not reported as being experienced or playing a role in one’s departure, we assume that the factor was absent and unimportant, respectively.

Despite these limitations, we believe autobiographies offer important and unique insights into the causes of terrorist disengagement. They provide deep and individual reflections of terrorist careers, while representing a relatively large sample of diverse terrorist groups operating in different regions. Utilizing the entire universe of English-language autobiographies also circumvents many of the selection issues associated with interviews of former terrorists, which often rely on snowball or proximity sampling and/or are associated with a single terrorist group or region. Finally, additional analyses reveal that the socio-demographic characteristics of our sample are comparable to existing studies of individuals involved in terrorism.

### Results

Of the 170 disengagement events included in our data, 29% (forty-nine) are cases of individual voluntary disengagement (Table 2). Individual, involuntary disengagements account for half (eighty-five) of all disengagement events. Of these, 89% (seventy-six) were due to imprisonment, while 7% (six) were the result of expulsion. In the other three cases, the individual was unable to remain involved due to circumstances beyond his or her control (for example, a severe leg injury or father

<table>
<thead>
<tr>
<th>Collective</th>
<th>Individual</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voluntary</td>
<td>14.1</td>
<td>28.8</td>
</tr>
<tr>
<td>(n = 24)</td>
<td>(n = 49)</td>
<td>(n = 73)</td>
</tr>
<tr>
<td>Involuntary</td>
<td>7.1</td>
<td>50.0</td>
</tr>
<tr>
<td>(n = 12)</td>
<td>(n = 85)</td>
<td>(n = 97)</td>
</tr>
<tr>
<td>Totals</td>
<td>21.2</td>
<td>78.8</td>
</tr>
<tr>
<td>(n = 36)</td>
<td>(n = 134)</td>
<td>(n = 170)</td>
</tr>
</tbody>
</table>

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57 Cordes, “When Terrorists Do the Talking.”
58 To probe the plausibility of the autobiographical data and corroborate accounts, we conducted in-depth interviews with three subjects whose autobiographies we read and coded. We found that the interview accounts were largely consistent with the autobiographical data.
59 See Section 4 of the Supplemental Online Appendix.
Our forty-nine cases of individual voluntary disengagement represent thirty-two unique individuals involved in thirty-four terrorist groups including AQ, Armed Islamic Group (GIA), the IRA, the Irish National Liberation Army (INLA), PIRA, Weather Underground, Hammerskin Nation, KKK, National Alliance, the Mau Mau, M-19, Hamas, Red Hand Commandos (RHC), Irgun, Hukbalahap, Army of God, Mensheviks, ANC, and Kosovo Liberation Army (KLA).60 Twenty-five of the thirty-two represent one observation each. Four individuals represent two observations each and two individuals represent three observations each. For those with multiple individual, voluntary disengagement events in our data there are variations in their reported reasons for exiting across events. Finally, one individual, Aukai Collins, represents a total of ten of the forty-nine observations. Because we believe Collins represents an important type of terrorist and therefore should not be excluded on the grounds he is in some way unusual, we present our results with Collins included. As a robustness check, we run our analysis without Collins, and the key findings do not change.61

The control group consists of people who involuntarily left the terrorist organization, often through imprisonment, and then re-engaged rapidly once able to do so. It is reasonable to assume that they would have remained engaged in the terrorist group had it been within their control, and they therefore make a suitable control group for our analysis. There are fifty-four observations within the dataset that comprise the control group, representing thirty-six individuals. Twenty-four of these represent one observation each. Two individuals represent two observations, three individuals represent three observations, and one individual represents five observations. Terrorists within this sub-sample were part of twenty-four unique terrorist organizations, including the ANC, Hamas, IRA, Irgun Zvai Leumi, M-19, PFLP, PIRA, Red Army Faction, Sundance, UDA, and the Weathermen.

**Why Terrorists Choose to Leave**

This section presents statistics on the frequency with which individuals were experiencing certain pushes and pulls at the time of their disengagement. We compare frequencies for those whose disengagement was individual and voluntary with those in the control group, whose disengagement was involuntary and who subsequently re-engaged.62 In addition, we report how often those who voluntarily

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60 See Table A3 in the Supplemental Online Appendix for the distribution of engagement events that resulted in voluntary disengagement by group as well as the distribution of individual involuntary disengagements followed by a re-engagement (our control group) by terrorist group.

61 See Section 5 of the Supplemental Online Appendix. The only notable change is that experiencing the desire to seek employment or education has a statistically significant effect on disengagement at the .10 level. However, the experience of push factors—specifically the ones we note—are still more likely to increase the probability an individual will leave and are more likely to be cited as reasons for leaving.

62 See Table A2 in the Supplemental Online Appendix for a distribution of engagement events by group for our control group and the sub-set of individual, voluntary disengagements.
disengaged cite certain push and pull factors as playing a role (large or small) in their disengagement decision.

The findings suggest that push factors are more likely to be experienced by those who choose to walk away from terrorism and are more likely to be reported as playing a role in their exit decisions than pull factors (Tables 3 and 5). The push factors most frequently reported as being experienced and playing a role in individuals’ voluntary disengagement decisions are disillusionment with the strategy or actions of the group, disillusionment with leaders and members, and disillusionment with one’s day-to-day tasks (or role) within the group. These factors fall within the broader push factor of unmet expectations, which involve a common realization that there is a stark contrast between the fantasies that led one to join a terrorist group and the daily realities of involvement.

The most prevalent push/pull factor in explaining disengagement decisions is disillusionment with the strategy or actions of the group. In more than half (59%) of all cases of individual voluntary disengagement, the person was experiencing such disillusionment at the time of his or her disengagement compared with just 24% of individuals in the control group. Further, in more than half (55%) of all cases of individual voluntary disengagement, this disillusionment is reported as playing a large (37%) or small (18%) role in leaving.

The next most common push factor reported in our sample is disillusionment with leaders. In more than half (55%) of all cases of individual voluntary disengagement, individuals reported experiencing disillusionment with group leaders, compared to just 17% of those in the control group. For those whose disengagement was voluntary, disillusionment was reported as playing a role in the decision

Table 3. Percentage of voluntary disengagement events in which push factors were reported as present and playing a role and control group comparison.

<table>
<thead>
<tr>
<th>Push Factor</th>
<th>Control Group (n = 54) Experience (%)</th>
<th>Voluntary Disengagement (n = 49) Experience (%)</th>
<th>Any Role (%)</th>
<th>Large Role (%)</th>
<th>Small Role (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disillusionment with strategy or actions</td>
<td>24.1 59.2 55.1 36.7 18.4</td>
<td>Disillusionment with leaders 16.7 55.1 44.9 30.6 14.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disillusionment with members</td>
<td>16.7 49.0 42.9 26.5 16.3</td>
<td>Disillusionment with day-to-day tasks 5.6 49.0 42.9 22.5 20.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of faith in ideology</td>
<td>N/A</td>
<td>N/A</td>
<td>28.6</td>
<td>16.3</td>
<td>12.2</td>
</tr>
<tr>
<td>Burnout</td>
<td>13.0 30.6 24.5 22.5 2.0</td>
<td>Fear of being caught 44.4 34.7 18.4 6.1 12.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear of being a victim of violence</td>
<td>16.7 16.3 10.2 4.1 6.1</td>
<td>Fear of being a victim of violence 16.7 16.3 10.2 6.1 4.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulty living a clandestine lifestyle</td>
<td>5.6 16.3 10.2 6.1 4.1</td>
<td>Difficulty coping with attacks 5.6 16.3 0.0 0.0 0.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regret for role in attacks</td>
<td>13.0 18.4 0.0 0.0 0.0</td>
<td>Regret for role in attacks 13.0 18.4 0.0 0.0 0.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological distress</td>
<td>18.5 20.4 0.0 0.0 0.0</td>
<td>Psychological distress 18.5 20.4 0.0 0.0 0.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physiological distress</td>
<td>3.7 10.2 0.0 0.0 0.0</td>
<td>Physiological distress 3.7 10.2 0.0 0.0 0.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. N/A – No measure is available in our data.
to leave in 45% of all cases, playing a large role in 31% of disengagement decisions and a small role in an additional 14%.

Disillusionment with group members is also reported as a fairly common reason for disengagement. In nearly half (49%) of all cases of individual voluntary disengagement, the terrorist reported experiencing disillusionment with members, compared with just 17% of those in the control group. Among those whose disengagement was voluntary, the factor was reported to play a role in the exit decision in 43% of all cases (a large role in 27% of all cases and a small role in 16%).

However, an equally common cause of disengagement was disillusionment with one’s day-to-day tasks. In nearly half (49%) of cases of individual voluntary disengagement, subjects reported disillusionment with their daily tasks, compared with just 6% of individuals in the control group. In 43% of all cases of individual voluntary disengagement, this factor is reported as playing a role in the departure (a large role in 23% of all cases and a small role in an additional 20%).

Push factors less commonly reported to play a role in disengagement decisions include loss of faith in the ideology (29%), burnout (25%), fear of being caught or captured (18%), and fear of becoming a victim of violence (10%). Table 4 breaks down whether individuals cited loss of faith in the ideology as playing a role in their disengagement decisions by level of ideological commitment at the time of departure. The results reveal that in nearly half (47%) of the forty-nine cases, the individual remained very committed to the group’s underlying ideology when exiting. In an additional 23% of cases, they remained somewhat committed. In conjunction with Table 3, these results lend support to hypothesis H2, that de-radicalization—while an important cause of disengagement for some—is not the most prevalent cause of disengagement nor a necessary pre-requisite.

Slightly less common than loss of faith in the ideology, burnout was reported as playing a role in a quarter (25%) of all cases and was much more likely a primary, rather than secondary, cause of one’s departure. Those who voluntarily disengaged, however, were twice as likely to report experiencing burnout (31%) as those in the control group (13%). Fear of being caught or being the victim of violence, although not common push factors in the literature on terrorist disengagement (and, as

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**Table 4. De-radicalization and disengagement.**

<table>
<thead>
<tr>
<th>Level of Ideological Commitment at Disengagement</th>
<th>No Role</th>
<th>Small Role</th>
<th>Large Role</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>4</td>
<td>4</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>(8.2)</td>
<td>(8.2)</td>
<td>(14.3)</td>
<td>(30.6)</td>
</tr>
<tr>
<td>Somewhat</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(16.3)</td>
<td>(4.1)</td>
<td>(2.0)</td>
<td>(22.5)</td>
</tr>
<tr>
<td>Very</td>
<td>23</td>
<td>0</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>(46.9)</td>
<td>(0.0)</td>
<td>(0.0)</td>
<td>(46.9)</td>
</tr>
<tr>
<td>Totals</td>
<td>35 (71.4)</td>
<td>6 (12.3)</td>
<td>8 (16.3)</td>
<td>49 (100.0)</td>
</tr>
</tbody>
</table>

*Note. Chi-square = 22.13, p = .000.*
such, are not listed in Table 1), are important in the literature on criminal desistance and might pick up “difficulty living a clandestine lifestyle” and “burnout,” which is why we include them here. However, fear of being caught or of being the victim of violence were cited as playing a large role in an individual’s decision to exit in just 6% and 4% of cases, respectively.

Similarly, the difficulties one might experience living a secret, clandestine life and the distress associated with carrying out attacks are not frequently cited reasons for leaving in our data. Only difficulty living a clandestine lifestyle was reported to influence decisions to disengage, with 6% citing it as playing a large role and 4% a small role. Not a single individual who experienced physiological or psychological distress as a result of their involvement, regret over their role in attacks, or difficulty coping with their role in attacks reported that these factors played a role (large or small) in their decision to leave. However, a possible explanation for this finding—as well as our findings regarding the fears associated with being caught or a victim of violence—may be that for those who experience such distress at the start of their terrorist careers, involvement in terrorism is short-lived and the writing of an autobiography is therefore unlikely. Future research will need to discern whether such factors are unlikely pushes out of terrorism or are more likely to occur early in terrorists’ careers.

Turning to the potential pull factors listed in Table 1, we see competing loyalties are thought to play an important role in drawing individuals out of terrorist groups. Similar to unmet expectations, competing loyalties can take many forms, including loyalty to one’s marriage, family, nation, job, education, or religion. We separately measured those more specific competing loyalties most associated with terrorist disengagement in the literature (that is, marriage and family, education and employment, and religious conversion). Table 5 lists the relative frequency with which certain pull factors were experienced prior to—and cited as playing a large or small role in—individuals’ voluntary exit decisions. Comparing Tables 3 and 5, we observe that, on average, individuals who voluntarily disengaged were more likely to report experiencing push rather than pull factors and to cite push factors as playing a role in their leaving. This is not to say that pull factors are unimportant and should be completely discounted. As Table 5 reveals, amnesty, financial incentives, interactions with moderate peers, family demands and desires, careers, etc. may still be critical for pulling certain individuals out of terrorist groups. They also may play an important role in dissuading re-engagement.

Table 5 suggests that for only a select few, the decision to disengage centers around family demands or desires. The desire to dedicate more time to one’s family or the feeling that being involved in terrorism was too hard to balance with

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family life were reportedly experienced in 26.5% and 20.4% of cases of individual voluntary disengagement, respectively. However, they reportedly played a large role in explaining just 6.1% and 4.1% of all exit decisions, respectively. The desire to marry was experienced much less frequently (8% of all cases), and in only 4% of all cases was it reported to play a role in the disengagement decision. When controlling for marital status, the percentage increases only slightly to 9% of cases in which the individual was single. Similarly, in only 10% of cases did the individual express a desire to have children while engaged. In most of these instances, the factor was reported to play a role in leaving (8% of total cases). When controlling for parental status, the percentage in which the desire to have children played a large role in leaving only rises slightly from 4% of all cases to 8% of cases in which the person had no children of his or her own.

Positive interactions with moderates, including family and friends, are thought to be another important pull factor out of terrorist life. These relationships provide the terrorist with alternatives outside the group and may help facilitate the development of pro-social attitudes, causing one to question his or her beliefs and/or behavior. To test the relative importance of this factor, we measured the extent to which individuals maintained ties while they were engaged in terrorism to others outside the group and non-radicals outside the group, as well as whether friends, family, or others (such as a mentor or religious leader) played a role in convincing them to leave. In 69% of cases of individual voluntary disengagement, the individual maintained ties to people outside the terrorist group, and in 67% of cases, there were ties to non-radicals outside the group. Yet, friends and/or family were

Table 5. Percentage of voluntary disengagement events where pull factors were reported as present and playing a role and control group comparison.

<table>
<thead>
<tr>
<th>Pull Factor</th>
<th>Control Group (n = 54)</th>
<th>Voluntary Disengagement (n = 49)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experienced (%)</td>
<td>Experienced (%)</td>
</tr>
<tr>
<td>Desire to seek employment/education</td>
<td>16.7</td>
<td>26.5</td>
</tr>
<tr>
<td>Dedicate more time to family</td>
<td>13.0</td>
<td>26.5</td>
</tr>
<tr>
<td>Too hard to balance with family life</td>
<td>24.1</td>
<td>20.4</td>
</tr>
<tr>
<td>Financial incentives</td>
<td>—</td>
<td>16.3</td>
</tr>
<tr>
<td>Dedicate more time to existing job/</td>
<td>5.6</td>
<td>14.3</td>
</tr>
<tr>
<td>educational program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amnesty</td>
<td>—</td>
<td>12.2</td>
</tr>
<tr>
<td>Desire to have children</td>
<td>0.0</td>
<td>10.2</td>
</tr>
<tr>
<td>Desire to marry</td>
<td>5.6</td>
<td>8.2</td>
</tr>
<tr>
<td>Religious conversion</td>
<td>—</td>
<td>4.1</td>
</tr>
<tr>
<td>Ties to individuals outside terrorist group</td>
<td>77.8</td>
<td>69.4</td>
</tr>
<tr>
<td>Ties to non-radical individuals outside</td>
<td>74.1</td>
<td>67.4</td>
</tr>
<tr>
<td>terrorist group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends and family convinced to leave</td>
<td>—</td>
<td>N/A</td>
</tr>
<tr>
<td>Others convinced to leave</td>
<td>—</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Note. N/A – Not available. We did not code whether ties to individuals played a role in leaving, but a separate variable as to whether certain individuals convinced the terrorist to leave. The last 4 variables in the table can be read together to gauge whether individuals had ties to individuals outside the group and whether those relationships were critical in their disengagement. “–” represents factors not applicable to involuntary disengagement.
reported as playing a role in convincing the individual to leave in just 14% of cases, and their role was usually secondary. Other key people played a role in convincing terrorists to leave in only 16% of cases, although in the majority of these, they played a large role. Thus, the role of moderates in persuading individuals to disengage does not seem to be a common pull out of terrorist life in our data. Indeed, such ties were more prevalent in our control group (Table 5).

Our findings further suggest work or educational demands or desires only convince a small percentage of individuals involved in terrorism to leave. Although the desire to seek employment or education outside the group was reportedly experienced in 27% of cases of individual voluntary disengagement, it was cited as playing a large role in explaining the decision to leave in just 8% and a small role in an additional 6%. Likewise, the need or desire to dedicate more time to an existing conventional career or program of study reportedly played a large role in just 4% of all exit decisions and a small role in an additional 6%.

Religious conversion is also not a common cause of disengagement in our data, occurring in just 4% of all individual voluntary disengagements. In every one of these cases, however, the conversion reportedly played a large role in the exit decision. Thus, while not commonly experienced, the data suggests that genuine religious conversion can be a powerful factor for leaving if it does occur.

Finally, our results suggest that neither amnesty nor financial incentives commonly play a role in disengagement decisions. But amnesty, when extended, could be a potentially important factor. Consistent with our findings in Table 4, individuals were granted amnesty in 12% of cases of individual voluntary disengagement, and in two-thirds of these cases, the factor was reported to play a large role in the decision to leave.

Because individuals may experience a combination of push and pull factors that shape their exit decisions, we also considered the number of pushes and pulls reported to play a role. In 80% of cases, individuals reported at least one and up to nine of the pushes listed in Table 3 as playing some role in their departure. By contrast, in just 49% of cases, subjects reported at least one pull factor listed in Table 5 as a factor in their exit decision. On average, 2.5 push factors were cited as playing a role compared to 1.2 pulls. In more than half (55%) of cases of individual voluntary disengagement, a combination of 2 or less push and/or pull factors played a role in the individuals’ decision and the average number of total pushes and pulls experienced was 3.6.

This finding that push factors are more commonly experienced and cited as playing a large role in individuals’ decisions to exit than pull factors lends strong support to hypotheses H1. The analysis also found strong support for hypothesis H2, that de-radicalization, while important for some individuals, is not reported to be a leading cause of leaving nor a necessary condition for it. As our findings are contingent upon the use of autobiographical data, one could argue individuals report that push factors drive disengagement decisions when, in reality, it is pull factors. However, in-person interviews with individuals formerly involved in
terrorism suggest that those who lie about their reasons for leaving are more likely to cite pull factors; it is easier to tell the leadership and fellow group members that one has to leave, for example, to take care of his or her family than it is to say they “have a fundamental disagreement” with the group’s ideology or tactics or are burned out.64

Another potential concern is that certain groups may be overrepresented in our sample and individuals may leave these groups for different reasons than other groups. While it is impossible to know how representative our sample is of the terrorist population by group (as we lack credible information on such a clandestine population), it is true that certain groups such as the IRA, the PIRA, the ANC, the UDA, the Mau Mau, and the Weathermen may be overrepresented. To address this possibility, we re-analyzed the data in Tables 3 and 5, calculating the percentage per group and then averaging across groups, thereby weighting each group equally. The results reaffirm hypotheses H1 and H2.65 Push factors are much more likely to be experienced by individuals who voluntarily disengage and cited as playing a role in their leaving than pull factors. We also find that loss of faith in the ideology is not the most common push factor experienced, nor the one most cited in playing a role in disengagement decisions. Moreover, the relative ranking of push and pull factors remains nearly the same. The only notable exceptions are that disillusionment with day-to-day tasks now ranks slightly higher than disillusionment with members, and loss of faith in the ideology ranks higher than burnout.

To test whether one’s susceptibility to pull factors is moderated by level of ideological commitment (H3), we examined the percentage of disengagement events in which at least one push or pull factor was cited as playing a role in exit decisions by level of ideological commitment (Table 6). Importantly, at least one push factor and at least one pull factor was reported as being experienced while engaged in all cases of individual voluntary disengagement. However, individuals “not at all” committed to the group’s underlying ideology at the time of their departure were more than twice as likely to cite at least one pull factor as playing a large role in their leaving when compared with those “somewhat” committed and more than

<table>
<thead>
<tr>
<th>Ideological Commitment at Time of Disengagement</th>
<th>% Reporting at Least One Push Played Large Role</th>
<th>% Reporting at Least One Push Played Small Role**</th>
<th>% Reporting at Least One Pull Played Large Role***</th>
<th>% Reporting at Least One Pull Played Small Role***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all (n = 15)</td>
<td>73.3</td>
<td>73.3</td>
<td>66.7</td>
<td>53.3</td>
</tr>
<tr>
<td>Somewhat (n = 11)</td>
<td>81.8</td>
<td>72.7</td>
<td>27.3</td>
<td>54.6</td>
</tr>
<tr>
<td>Very (n = 23)</td>
<td>52.2</td>
<td>30.4</td>
<td>17.4</td>
<td>8.7</td>
</tr>
<tr>
<td>Chi-square/p-value</td>
<td>3.50/174</td>
<td>8.91/.012</td>
<td>10.07/.006</td>
<td>11.32/.003</td>
</tr>
</tbody>
</table>

*p < .10; **p < .05; ***p < .001.

64 Interview with former member of nationalist terrorist group, 11 September 2012; interview with former member of a right-wing terrorist group, 10 December 2012. All interviews were conducted in confidentiality, and the names are withheld by mutual agreement.

65 See section 5.E of the Supplemental Online Appendix for the full results.
three times as likely as those “very” committed. On the other hand, level of ideological commitment has no statistically significant effect at the .05 level on the reporting of at least one push factor as playing a large role in disengagement decisions. Finally, those “not at all” and “somewhat” committed were much more likely than those who were “very” committed to cite at least one pull and at least one push factor as playing a small role in their leaving.66

However, ideological commitment fluctuates, often dramatically, over the course of an individual’s involvement in terrorism. These data capture ideological commitment at the time of one’s departure, which may be influenced by the experience of certain push and pull factors. Thus, it is difficult to discern whether the level of ideological commitment makes one more susceptible to pulls factors or greater exposure to pull factors decreases ideological commitment. However, the data also capture whether they reported the factor as playing a role in their departure. It is therefore telling that those who are less ideologically committed are more likely to report at least one pull factor as playing a large role in their leaving. While more and better data are needed to verify the relationship, the findings lend some preliminary and qualified support for H3 that pull factors are more likely to play a role for individuals less ideologically committed. The effects of ideological commitment on susceptibility to push factors warrants further investigation, as there is some evidence of a moderating effect for those playing a small role, but no clear evidence of a similarly strong effect for those factors that drive disengagement decisions.

Pushes, Pulls, and the Likelihood of Voluntary Disengagement

Our findings in the previous section lend support to hypothesis H1 that push, rather than pull, factors more commonly explain voluntary disengagement decisions. This section presents a series of logistic regression models to test whether the experience of certain push and pull factors (regardless of whether or not they are reported to play a role in leaving) have a statistically significant effect on the likelihood of voluntary disengagement, while also controlling for certain individual-level characteristics. We exclude those pull factors only experienced by individuals who voluntarily disengage, such as amnesty, financial incentives, religious conversion, and friends, family or others convincing the individual to leave.

Our sample of individuals who disengaged voluntarily and our control group yields 103 observations. Table 7 presents summary statistics for each variable. Our dependent variable is Disengagement type, where 1 represents a case of individual voluntary disengagement and 0 represents an individual involuntary disengagement followed by re-engagement. A set of standard controls from the terrorism

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66 In six cases of individual, voluntary disengagement, the individual did not report in their autobiography any push or pull as playing a role (large or small) in their departure, even though some factors were reported as experienced. As these cases are disproportionately concentrated among those who were very committed, we re-ran our results excluding these cases and the findings are robust to their exclusion (see Section 5.D of the Supplemental Online Appendix).
literature is also included in each model to account for potentially important differences across individuals (for example, gender, family socio-economic status, age at engagement). The analysis of pull factors also controls for whether the individual was married or had children prior to his or her engagement. Missing data in the control variables reduces our sample to seventy-five. However, a review of the data suggests that the missing observations are relatively random and should not therefore influence our results. Robust standard errors are clustered at the group level to account for the fact that the reasons for leaving may be correlated within groups and our distribution of groups, as noted previously, is not likely random.67

Due to the fairly small sample size, we run bivariate analyses of the push/pull factors as multivariate analysis quickly becomes subject to multicollinearity issues.

Overall, the findings of our logistic regression analysis (Tables 8 and 9) further suggest that the experience of certain push factors while engaged in terrorism are more likely to be associated with an increased likelihood of voluntary disengagement than the experience of pull factors. The experience of disillusionment with the strategy or actions of the group, leaders, members or day-to-day tasks, as well as burnout, all produce a statistically significant increase in the likelihood that an

67We also note that since our unit of observation is the disengagement event, the reasons for leaving may be correlated within individuals, although examination of the data suggests that individuals with multiple disengagement events usually left for different reasons. Nevertheless, as a robustness check, we re-ran our analysis with robust standard errors clustered at the individual level and our key findings hold (see Section 5.G–5.I of the Supplemental Online Appendix).
Table 8. Bivariate analysis of push factors—Dependent variable: individual voluntary disengagement.

<table>
<thead>
<tr>
<th>Push Factors</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disillusionment with strategy/actions</td>
<td>1.81 (.53)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disillusionment with leaders</td>
<td>2.40 (.46)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disillusionment with members</td>
<td>1.27 (.46)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disillusionment with day-to-day tasks</td>
<td>2.71 (.69)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burnout</td>
<td>1.56 (.77)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear of being a victim of violence</td>
<td>-1.01 (.54)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulty living a clandestine lifestyle</td>
<td>-.97 (1.12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulty coping with attacks</td>
<td>-1.68 (1.02)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regret for role in attacks</td>
<td>-.41 (.55)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological distress</td>
<td>-.67 (.56)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physiological distress</td>
<td>-1.15 (.73)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-1.58 (.86)</td>
<td>-.80 (.63)</td>
<td></td>
</tr>
<tr>
<td>Family socio-economic status</td>
<td>-1.50 (.87)</td>
<td>-.33 (.64)</td>
<td></td>
</tr>
<tr>
<td>Age at engagement</td>
<td>-1.17 (.80)</td>
<td>-.23 (.50)</td>
<td></td>
</tr>
<tr>
<td>Level of education prior to engagement</td>
<td>-1.46 (.78)*</td>
<td>-.21 (.47)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-1.43 (.90)</td>
<td>-.59 (.59)</td>
<td></td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>.1332</td>
<td>.2199</td>
<td>.0811</td>
</tr>
</tbody>
</table>

Note. Robust standard errors are clustered at the group level.
*p < .10; **p < .05; ***p < .001.
**Table 9.** Bivariate analysis of pull factors—Dependent variable: individual voluntary disengagement.

<table>
<thead>
<tr>
<th>Pull Factors</th>
<th>Coefficient</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desire to seek employment/education</td>
<td>.77 (0.83)</td>
<td></td>
</tr>
<tr>
<td>Dedicate more time to family</td>
<td>-.73 (0.74)</td>
<td></td>
</tr>
<tr>
<td>Too hard to balance with family life</td>
<td>-.64 (0.49)</td>
<td></td>
</tr>
<tr>
<td>Dedicate more time to existing job/education program</td>
<td>1.07 (1.64)</td>
<td></td>
</tr>
<tr>
<td>Desire to marry</td>
<td>-.71 (0.92)</td>
<td></td>
</tr>
<tr>
<td>Ties to individuals outside terrorist group</td>
<td>0.45 (0.60)</td>
<td></td>
</tr>
<tr>
<td>Ties to non-radical individuals outside terrorist group</td>
<td>0.08 (0.56)</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-1.66 (1.16)</td>
<td></td>
</tr>
<tr>
<td>Family socio-economic status</td>
<td>-1.54 (1.02)</td>
<td></td>
</tr>
<tr>
<td>Age at engagement</td>
<td>-1.47 (0.94)</td>
<td></td>
</tr>
<tr>
<td>Level of education prior to engagement</td>
<td>-1.54 (1.15)</td>
<td></td>
</tr>
<tr>
<td>Married prior to engagement</td>
<td>-1.69 (0.97)</td>
<td></td>
</tr>
<tr>
<td>Had children prior to engagement</td>
<td>-1.45 (0.88)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-1.50 (0.97)</td>
<td></td>
</tr>
<tr>
<td><strong>n</strong></td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td><strong>Pseudo R²</strong></td>
<td>.0826</td>
<td>.0826</td>
</tr>
</tbody>
</table>

Note. Robust standard errors are clustered at the group level. There are no results for the “Desire to have children” as there is not sufficient variation on this variable (see Table 5).

*p < .10; **p < .05; ***p < .001.
individual will voluntarily disengage. Somewhat unexpectedly, we find that difficulty coping with attacks actually reduces the likelihood that an individual will choose to walk away. Although we can merely speculate, perhaps these individuals are in more violent operational roles that make the potential for prosecution and leaving less likely. Turning to the pull factors (Table 9), we see that none are statistically significant.

To gauge the substantive effects, we simulated the expected probability of disengagement by setting all control variables to their means and allowing whether the terrorist experiences a particular push or pull factor to vary. The results suggest that the experience of disillusionment with one’s day-to-day tasks has the largest substantive effect increasing the probability a terrorist will choose to leave by fifty-five percentage points. Disillusionment with the group’s leadership increases the likelihood of individual voluntary disengagement by fifty-two percentage points and disillusionment with the group’s strategy or actions increases the likelihood of individual voluntary disengagement by forty-one percentage points. Experiencing burnout or disillusionment with group members has a slightly smaller substantive effect, increasing the probability an individual will choose to leave by thirty-five and thirty percentage points, respectively. Difficulty coping with attacks reduces the probability an individual will leave on their own by thirty-five percentage points.

**Summation and Implications**

Existing research highlights the potential importance of certain push/pulls factors in explaining terrorist disengagement, but reveals little about the relative frequency with which these factors drive disengagement decisions in the terrorist population. Data gleaned from eighty-seven autobiographies representing the lives of eighty-five unique terrorists spanning a range of groups and time periods demonstrate that the experience of push factors, especially disillusionment with the group’s strategy or actions, leaders, members, or one’s day-to-day tasks, increases the probability that a terrorist will choose to leave and is more commonly cited as the primary reason behind exit decisions than the experience of pull factors. Loss of faith in the group’s ideology, while important in explaining some decisions to leave, was not a necessary pre-requisite for disengagement or the most common cause. Our results, however, suggest ideological commitment may moderate one’s susceptibility to pull factors.

These findings affirm the veracity of Rusbult’s investment model in explaining disengagement decisions. Although individuals in the control group were less likely to experience push factors, some did and chose not to leave, returning to terrorism

68 Using Gary King, Michael Tomz, and Jason Wittenberg’s CLARIFY macro, we generated one thousand simulated observations based on the regression estimates presented in the Models from Tables 3 and 4 and calculated expected values based on the distribution. Gary King, Michael Tomz, and Jason Wittenberg, “Making the Most of Statistical Analyses: Improving Interpretation and Presentation,” *American Journal of Political Science* 44 no. 2 (April 2000), 341–355.
following their imprisonment. This supports the idea that commitment to a group and the likelihood of exit is not only influenced by push/pull factors, but also by satisfaction with involvement, the alternatives available, and the investments made. The fact that push factors (which affect primarily the satisfaction component) were more commonly associated with disengagement than pull factors (which affect primarily the alternatives component) lends support to extensions of Rusbult’s model that argue the satisfaction component may be more pivotal in explaining exit decisions than alternative quality.69 Related, we offer preliminary evidence that ideology may play an important role in binding individuals to groups by increasing satisfaction with involvement and lessening susceptibility to pull factors. This finding is consistent with Oppenheim et al.’s recent research on Colombia’s civil war, which demonstrates that ideologically committed insurgents are less likely to demobilize.70

Disillusionment features prominently in recent one-off tales of defection from ISIL, and our results—which highlight the importance of push factors and disillusionment in particular—suggest that these accounts may not be anomalies. One ISIL defector, Hamza, recently reported that disillusionment with the strategy/actions of the group—such as being asked to execute Sunnis (some of whom he knew) and being offered young Yazidi women to rape—“shattered his idealistic enthusiasm” for ISIL.71 Hamza notes, “These scenes terrified me,” and he came to realize that ISIL was “far from the principles of Islam.”72 Another former fighter, Abu Ibrahim, reports becoming disillusioned with ISIL’s killing of Western aid workers and journalists.73 Ibrahim explains, “Some of the policies such as the beheadings of non-combatants, therefore innocent, some of those things I didn’t agree with.”74 Khadija, a female ISIL defector, reports feeling disillusioned with her role in the organization, including the possible brutality she might face if married to a foreign fighter, as well as ISIL’s decision to crucify a 16-year-old boy.75 Disillusionment with ISIL’s actions, particularly those that contradict the group’s ideology (for example, selling oil to the Assad regime, smoking, rape), also feature in Anne Speckhard and Ahmet S. Yayla’s report on thirteen anonymous ISIL defectors.76

70Oppenheim et al., “True Believers, Deserters and Traitors.”
72Ibid.
74Ibid.
76Anne Speckhard and Ahmet S. Yayla, “Eyewitness Accounts from Recent Defectors from Islamic State: Why They Joined, What They Saw, Why They Quit,” *Perspectives on Terrorism* 9 no. 6 (December 2015): 95–118.
Obtaining large samples of information on terrorists or former terrorists that are representative and still permit in-depth and nuanced analysis is difficult, and our findings should be tempered by our fairly small sample of involuntary disengagement events and the limitations noted with autobiographical data. Although future research must continue to probe and test the relationships observed here (perhaps using larger samples of interview data across a range of groups), our results suggest that counterterrorism policies focused on influencing the most prevalent push factors may be more effective in persuading terrorists to disengage than those that rely solely on influencing pull factors. Efforts to de-radicalize individuals may persuade some to leave and make others more susceptible to potential pulls, but in our sample nearly half of those who chose to walk away from terrorism did so still very committed to the ideology, and some members were never committed to the ideology to begin with. Finally, although pull factors were not a common cause of disengagement in our sample, they were pivotal for some and should not be completely discounted. Pull factors may also play a critical role in terrorist rehabilitation and re-integration and in deterring re-engagement.

We focused our analysis on specific push/pull factors because this approach is the dominant framework in the existing literature on terrorist disengagement. However, as noted by Altier et al., the disengagement process is likely to be much more dynamic and interactive than the framework suggests. Investigating combinations or the co-occurrence of push/pulls prior to exit is a potentially useful avenue for future research, although one will still need to account for the fact that even combinations of factors are likely to influence each individual’s decision calculus differently. Further, the absence of a true control group of still-engaged terrorists is a particularly difficult challenge to this line of research. Despite these obstacles, an empirically grounded understanding of the causes of terrorist disengagement remains vital to persuading individuals to lay down their arms. Efforts to better understand the disengagement process can also highlight the disillusionment often associated with involvement and play an important role in deterring individuals from joining terrorist groups in the first place.

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