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# Myths and Realities of Female-Perpetrated Terrorism

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The authors examined the backgrounds and social experiences of female terrorists to test conflicting accounts of the etiology of this offending group. Data on 222 female terrorists and 269 male terrorists were examined across 8 variables: age at first involvement, educational achievement, employment status, immigration status, marital status, religious conversion, criminal activity, and activist connections. The majority of female terrorists were found to be single, young (<35 years old), native, employed, educated to at least secondary level, and rarely involved in criminality. Compared with their male counterparts, female terrorists were equivalent in age, immigration profile, and role played in terrorism, but they were more likely to have a higher education attainment, less likely to be employed, and less likely to have prior activist connections. The results clarify the myths and realities of female-perpetrated terrorism and suggest that the risk factors associated with female involvement are distinct from those associated with male involvement.

*Keywords:* terrorism, etiology, female offending

On November 9, 2005, a Belgium-born convert to Islam named Muriel Degauque ran into an Iraqi police patrol and detonated a bomb that killed five people and injured many others. Degauque's attack is often reported as a "wake-up call" for forensic professionals not simply because she was the first European female to conduct such an attack, but because she was an educated, reportedly well-mannered young women who came from a supportive family and community (Von Knop, 2007). Degauque's background contradicted widely held expectations about female involvement in terrorism, and it raised questions about how this type of offending might best be treated (Cunningham, 2003; Horgan & Braddock, 2010). Her case made clear how little is known about the risk factors associated with female-perpetrated terrorism.

When trying to build a systematic understanding of an offender group, it is useful to start with a description of "what is" (cf. Eke, Seto, & Williams, 2011; Hickle & Roe-Sepowitz, 2010; Putkonen, Weizmann-Henelius, Lindberg, Rovamo, & Häkkänen-Nyholm, 2011; Storey, Hart, Meloy, & Reavis, 2009). One benefit of description is that it tests popular (mis)conceptions about the kinds of personal backgrounds that characterize the offending group. For example, in contrast to early stereotypes, research has shown that males who engage in terrorism are typically well educated (Sageman, 2004), in regular employment (Krueger & Maleckova, 2003), and are as likely to be married as not (Pape, 2005). This kind of aggregate understanding may provide a firmer basis for evaluating individual cases and for theorizing about female terrorists in general. A second benefit of description is that it can test theories about why people engage in a particular crime. In their study of male Hezbollah terrorism, for example, Krueger and Maleckova (2003) found little evidence of a direct connection between education and militancy, thereby raising doubts about poor education as a risk factor for involvement in Hezbollah. In this manner, an evaluation of "what is" provides a foundation for additional efforts to understand the risk factors and intervention possibilities associated with female-perpetrated terrorism. A third related benefit of description is that it provides insights into the social dynamics that promote individuals' involvement in terrorist activities. This kind of insight is particularly relevant to terrorism because of its prevalence as a group-based offense that often requires community support for actors to be effective (Gill, 2007). Thus, an aggregate testing of "what is" may provide clinicians and policymakers with a much-needed evidence base that can inform their future efforts to develop practice and policy.

Despite the value of description, most existing studies of female-perpetrated terrorism comprise discursive reviews or case studies that do not test prevailing explanations for female involvement. In their review of the literature, Jacques and Taylor (2009) identified only three of 58 studies that contained any form of descriptive data. These three exceptions reported demographic data on females who were involved in specific conflicts (e.g., Chechen conflict, Speckhard & Akhmedova, 2006; Basque nationalist–separatist group Euskadi Ta Askatasuna [ETA], Hamilton, 2007) or who held specific roles within a specific conflict (e.g., Palestinian suicide bombers, Schweitzer, 2006). Moreover, of the three studies, only Hamilton (2007) considered her data against data for male terrorists, which is arguably necessary if one wishes to identify the unique etiology of female-perpetrated terrorism (cf. Gannon & Barrowcliffe, 2012). Thus, these exceptions have made some contribution to our understanding, but their lack of comparison across conflicts and their focus on description leave

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open a need for a comprehensive investigation of "what is" in female-perpetrated terrorism.

We respond to this need here by testing eight hypotheses about the nature of female involvement in terrorism. These hypotheses relate to three interrelated explanations for involvement that prevail in the current literature: First, there is a vulnerable demographic that is susceptible to involvement; second, social circumstances act as a driver of involvement; and, third, prior exposure to, or involvement in, criminality is a dominant precursor to involvement. Of the hypotheses advanced by these explanations, some have precedence because they either draw on research relevant to male terrorism (Horgan, 2008; Sageman, 2004) or because they map onto the static and contextual risk factors identified for other types of crime (e.g., sexual offenses, Beech & Ward, 2004; Gannon, Rose, & Ward, 2008). Others, however, are at least partly rooted in public stereotypes about terrorists (Horgan, 2005). Thus, by testing these hypotheses, we sought to test prevailing accounts of the factors associated with female-perpetrated terrorism, while also dispelling some broader misconceptions about this offending group.

## Explanations for Female-Perpetrated Terrorism

Many attempts to explain involvement in terrorism center on defining a *vulnerable demographic*, that is, a set of static and contextual factors relating to the individual that increases the risk of offending (Horgan, 2008). For example, age is often hypothesized as a factor on the basis that youth may be associated with an absence of self-regulation, a search for personal identity, and a naivety that leaves individuals vulnerable to recruitment into terrorism (Shelley, 2008). In a similar vain, some accounts argue that uneducated women are a vulnerable demographic for terrorism because of their ignorance and susceptibility to "brainwashing" or their belief that terrorism serves as the only way to earn respect (Pape, 2005). This focus on education is often linked with lack of employment. The argument for unemployment as a factor is that poverty or economic hardship forces people to "make a living" through terrorism, which acts also to restore the loss of social identity that results from unemployment (Atran, 2003; Taylor & Lewis, 2004).

These interconnected vulnerable demographic hypotheses are plausible, but there is good reason not to accept them at face value. Studies of these factors in male terrorist populations have supported the prediction that males are young in age (most are aged between 18 and 35 years; Ehrlich & Liu, 2002; Kimhi & Even, 2004; Sageman, 2004; Zedalis, 2004), but they have failed to find evidence to support the idea that males are poorly educated or more likely to be unemployed in comparison to their peers (Berrebi, 2007; Krueger & Maleckova, 2003; Sageman, 2004). More important, the evidence to support or refute these hypotheses for the female terrorist population is almost nonexistent. One exception is Reinares' (2004) finding that approximately 70% of female members of ETA were younger than 24 years of age. A second exception is Speckhard and Akhmedova's (2006) finding that 17 of 26 Chechen female suicide terrorists had finished high school. However, although both of these studies make useful contributions, their focus on a specific terrorist group and, in Speckhard and Akhmedova's case, a specific terrorist role, limits the extent to which they inform a characterization of female-perpetrated terrorism. For example, ETA is often recognized as having a history of recruiting young members (Bott et al., 2009), opening up the possibility that Reinares' finding is particular to this group. In this study, therefore, we sought to provide a fuller test of the vulnerability demographic explanation by testing three hypotheses: The backgrounds of female terrorists will show a prevalence of being young, being uneducated, and being unemployed.

A second explanation that is often discussed when examining the etiology of terrorism relates not to the individual but to the social circumstances in which a terrorist finds him- or herself. A number of prominent authors have argued that a precursor for terrorism is disconnection from society, and that the vulnerabilities stemming from this disconnection (e.g., impoverished social support) are critical to understanding offending (Atran, 2003; Gottschalk & Gottschalk, 2004). For example, in his study of global male salafi, Sageman (2004) found that 70% of his sample joined the jihad in a country where they had not grown up. He argued that isolation, resulting from emigration to a new culture and environment, might often be a factor in attracting individuals to join a terrorist group. In a similar argument, other researchers have pointed to a shift in social group (e.g., through religious conversion) as something that creates a social isolation that acts as a precursor to terrorist violence (Mili, 2006).

As with the individual vulnerabilities, a number of studies have tested the importance of social isolation in explaining male-perpetrated terrorism. For example, the proposal that male terrorists are socially isolated is inconsistent with recent evidence suggesting that males are often married and active members of their family (Berrebi, 2007; Kimhi & Even, 2004). Conversely, however, Sageman (2004) found frequent conversion to a nonsecular religion in his male salafi sample, with the resulting conversion prompting a change in the individual's social relationships. Thus, the role of social relationships in the etiology of male terrorism may be nuanced. Moreover, an isolated finding from Speckhard and Akhmedova (2006) suggests that it is unwise to assume that the findings for male terrorists transfer to their female counterparts. They found that only a few of their sample of female Chechen terrorists were married and, if anything, that there was an overrepresentation of widowers who turned to terrorism for revenge. This finding coupled with the differences in social roles found across men and women in societies where terrorism occurs (Eagly & Wood, 1999) suggest that it is important to determine the specific role of these factors in female-perpetrated terrorism. We therefore examined the role of social circumstances by testing three hypotheses: Immigration, religious conversion, and an absence of marriage will be prevalent in female terrorist life histories.

A third explanation that is common in existing accounts concerns individuals' exposure to criminality, either in terms of their own prior offending or the activism and criminality of those around them. Building on early criminological research, a number of authors have considered the link between organized crime and the funding of terrorist activities (Makarenko, 2004; Shelley & Picarelli, 2006), as well as the extent to which early male delinquency may lead to later violence and terrorism (Bakker, 2006; Welfare & Hollins, 2012). The perspective taken by these and similar accounts is that terrorism is a facet of a larger criminal lifestyle to which individuals arrive as part of a process of widening involvement (Horgan, 2008). Often associated with this perspective is the suggestion that family connections play a role in

shaping engagement in terrorism, particularly in conflicts that have spanned over generations (e.g., Northern Ireland). The emphasis is on normalization or habituation within communities (C. W. Mullins & Young, 2012), which, while overlapping with the socially focused factors identified above, is more acute as a risk factor for female offending.

Although the importance of exposure to criminality within the family or social group is well established as a risk factor for offending in general, the evidence in relation to terrorism is largely anecdotal (S. Mullins, 2009). Critically, most of the available accounts focus on men rather than women, underpinned by an understanding of the divergent social roles played by men and women in the relevant societies and the tendency for young men to socialize in gangs that become connected with criminality or terrorism (e.g., Oehme, 2008). This thinking is consistent with Sageman's (2004) finding that the majority of his male global salafi jihadists had peer links to terrorism, and that 14% became active in terrorist activities through their kin. Such findings often have led to the assertion that family and peer involvement is an important precursor for female offending, particularly given the "family" role often played by females in their communities (Eagly & Wood, 1999). However, to date, the only study of this factor among females found that just one third of a group of female ETA members had peers involved in terrorism (Hamilton, 2007). To determine whether or not Hamilton's (2007) finding can be generalized across conflicts, we tested the prevailing hypothesis that familial links to either activism specifically or criminality in general are prevalent in the female terrorist population.

As reviewed above, the extant literature continues to lack a clear, evidence-based understanding of the factors prevalent in the backgrounds of females who engage in terrorism. This is particularly true when female-perpetrated terrorism is considered in a broad sense across different conflicts and as distinct from, and something to be compared with, terrorism committed by male offenders. Given this lack of evidence, we examined the above predictions using a large and diverse sample of female terrorists and a comparison sample of male terrorists.

## Method

### Data

Data were information on eight variables relevant to the hypotheses for 222 female and 269 male terrorists. The male data were examined to provide a comparison group for the female data. These data were extracted from a set of archival biographical material obtained for each terrorist (see below). Although archival material of this kind is susceptible to limitations such as bias reporting and the absence of experimental control (Silke, 2001), it has proven a valuable and effective method in forensic research, particularly where access to the offending population is difficult (cf. Alison, Snook, & Stein, 2001; Giebels & Taylor, 2009; Levine, Taylor, & Best, 2011; Sageman, 2004; Wilson, 2000).

**Bibliographical material.** The bibliographical material was derived from three sources. All three sources were in English, although translations of material originally written in other languages (e.g., books, newspaper articles, Internet sites) were also included. First, we searched well-known bibliographic databases (Applied Social Sciences Index and Abstracts, Medline, PsycINFO, Sociological Abstracts, and ISI Web of Knowledge) and the British Library catalogue for the reference words *female*, *woman*, *terrorist*, *terrorism*, *martyr*, *suicide*, *bomber*, *guerrilla*, and *revolutionary*. The abstracts of the resulting articles were examined for references to terrorism, and where such references were found, the article was analyzed in full for details relevant to terrorist life histories. We also conducted equivalent searches of PhD theses using the databases PsycINFO and ISI Web of Knowledge. Second, the bibliography, footnote, and reference sections of the resulting articles were examined for further uncaptured articles, which we then obtained and integrated into the biographical material as before. We repeated this process of examining an article's citations until no new unseen citations appeared within the article being examined. To complement this process, we also used Google Scholar, PsycINFO, and ISI Web of Knowledge to conduct forward citation searches, whereby we identified and subsequently examined the content of articles that succeeded and cited the original article.

Third, we conducted Internet searches by inputting the above reference terms into a popular worldwide search engine. In cases in which the search returned a terrorist's name, the resulting name was used to instigate a further search. In an effort to capture a variety of perspectives, we retrieved information on the individuals from Websites compiled by research institutions, think-tanks, independent researchers, Western and non-Western media sources, Websites that presented as sympathetic to an extremist position, and, where possible, the official Websites of the relevant groups. A number of Websites were flagged repeatedly across the different searches (e.g., http://www.memri.org), and these Websites were, as a result, revisited and examined for all of the identified cases. On occasion, not all of the Websites generated by a search string were investigated. The decision to terminate the search procedure was made when no new information was added to the individual's biography for 50 search hits.

We sought to increase the reliability of the data through triangulation. Data triangulation is the use of multiple sources of information to provide cross-validation and the identification and dismissal of plausible rival accounts (Mathison, 1988). For example, interviews with family members can provide insight into the personality of individuals, their temperament, and their possible motivations. This may be triangulated with media reporting on the individual's life because media reporting is likely to draw on other sources of information and reflect a societal (rather than familial) perspective (Prentice, Taylor, Rayson, Hoskins, & O'Loughlin, 2011). In this project, data triangulation involved the first author ensuring that information in each of the biographies was evident in multiple independent sources. For example, research suggests that Western media tend to focus on personal aspects of female suicide terrorists, with actions minimized and credibility and influence diminished. In contrast, the Arab press is freer of gender stereotypes and downplays personal aspects of female terrorists (Issacharoff, 2006). Thus, to balance Western media reporting on an individual, we collected information from non-Western sources (e.g., Al-Jazeera reporting) and Western media reports that incorporated Arab press releases (e.g., BBC monitoring). Similarly, we sought to counterbalance the potential bias toward positive significant findings in Western reporting by including information stemming from martyr videos (translated into English) and reports from pro-Palestinian Websites. Searching this range of perspectives not only increased our confidence in the accuracy of the information

recorded, but it also enabled us to dismiss information when two or more sources contradicted one another.

Table 1 shows the frequency of female and male terrorists within the final data set as a function of group affiliation. As can be seen from Table 1, terrorists within this data set were involved in 13 conflicts underpinned by nationalist–separatist, social revolutionary, and religious fundamentalist issues (Donohue & Taylor, 2003). Some of the groups and associated conflicts have been active for decades, and others began more recently. The examination of females across multiple conflicts, rather than one specific conflict or one particular type of conflict, enables a level of analysis whose results speak at a general level to the offending group. If differences emerge at this general level, then they can be explored in the future through more detailed, conflict-specific analysis.

**Variable coding.** Table 2 outlines the criteria used to extract the eight variables from the biographical information. As can be seen from Table 2, all variables except age required the assignment of a case (i.e., terrorist) to one of several categories relevant to the variable. For example, the education variable required each case to be assigned to "no formal education," "primary education," "secondary education," or "tertiary education." In the case of the age, employment, education, and marital status variables, the categorization was rendered for the point at which individuals were first known to be involved in terrorism, either because they were known to have been recruited into the organization or because they undertook a terrorist act. The first author completed the variable coding by reading through the biographical information collected for each terrorist and extracting the information onto a datasheet. To ensure this coding was reliable, a second independent judge received an explanation of the coding scheme and then extracted the same information from 10 female and 10 male biographies. The agreement between the judge and first author across the biographies was 100% for each of the eight variables. Consequently, given the clear and unambiguous nature of the variables (i.e., they were not requiring coder interpretation), the first author completed the remainder of the coding.

One of the difficulties of coding the biographical data in this way was that information was not always available. This meant that it was not possible to code every variable for all of the cases. For example, age at first terrorist act could be discerned for only 263 (54%) cases because it was not always possible to establish the age at which a terrorist first engaged. By contrast, information on immigration and religious background (and therefore religious conversion) was available for all cases, largely because it was routinely presented in biographical accounts of the terrorist's background. As a result, we restricted our comparisons to cases in which there was evidence that allowed a positive coding of a variable (i.e., we did not infer a particular coding for a case on the basis of the absence of information). For example, when examining family activism, we compared only those cases in which there was evidence of family activism (e.g., her brother fought in jihad) against those cases in which there was clear evidence of no activism (e.g., the terrorist reporting that the family had no awareness or involvement). Similarly, we did not assign a level of education or the absence of education to a case unless there was information in the biography that allowed the coder to clearly assign one of the education categories. The final columns of Table 2 indicate the number and percentage of cases for which information on the eight variables was available.

## Results

### Vulnerable Demographics

**Age.** Figure 1 shows the age of first involvement in terrorism for the 101 females and 162 males for whom these data were available. The mean age of females within the sample was 22.6

Table 1
*Numbers of Male and Female Terrorists by Group*

| Conflict | Terrorist group | Date formed[a] | Female | Male | Total |
|---|---|---|---|---|---|
| Al-Qaeda | Al-Qaeda, al-Qaeda in the Islamic Maghreb | 1985 | 8 | 14 | 22 |
| Animal and environmental rights | Animal Liberation Front, Earth First, Earth Liberation Front, Stop Huntingdon Animal Cruelty USA | 1976 | 10 | 18 | 28 |
| Basque | Euskadi Ta Askatasun | 1959 | 24 | 2 | 26 |
| Chechnya | Groups acting for Chechen independence, including those allied to al-Qaeda | 1998 | 23 | 28 | 51 |
| Europe | Baader-Meinhof group, Movement Second June, Potere Operaio (Worker Power), Prima Linea, Red Brigades | 1968 | 30 | 34 | 64 |
| Iraq | Groups acting to end the occupation of Iraq | 2003 | 6 | 6 | 12 |
| Ireland | Irish Republican Army (IRA), Provisional IRA, Real IRA | 1922 | 34 | 66 | 100 |
| Japan | Aum Shinriyko | 1984 | 2 | 9 | 11 |
| Latin America | Socialist Renewal Current, Ejército Popular de Liberación (Popular Liberation Army), Fuerzas Armadas Revolucionarias de Colombia (Revolutionary Armed Forces of Colombia), Puerto Rican Independistas | 1964 | 32 | 32 | 64 |
| Nepal | Communist Party | 1996 | 16 | 15 | 31 |
| Palestine | Al Qassam Brigades, Fatah, Hamas, Popular Front for the Liberation of Palestine, Palestine Liberation Front, Palestinian Liberation Organization | 1959 | 29 | 36 | 65 |
| Sri Lanka | Liberation Tigers of Tamil Eelam | 1976 | 2 | 9 | 11 |
| Telengana | Communist Party | 2004 | 6 | 0 | 6 |

[a] Date on which the terrorist group was formed, as recorded in the University of Maryland's Terrorist Organization Profiles (see http://www.start.umd.edu/start/data_collections/tops/). Where multiple groups are associated with a conflict, the earliest known group formation is recorded.

Table 2
*Measurement Criteria for the Demographic Variables*

| Variable | Category | Coding definition | Cases with information, *n* (%) Female | Male |
|---|---|---|---|---|
| Age | 0–99 years | Coded as the year in which an individual was recruited into terrorism or first active as a terrorist, taking the earlier of the two when both were available. | 101 (45) | 162 (60) |
| Education | No formal education; primary education; secondary education; tertiary education | Coded as the highest education level completed or being actively undertaken at first involvement in terrorism. Tertiary education refers to all college- and university-based further learning courses. | 99 (45) | 143 (53) |
| Employment | Unemployed; student; employed | Coded as an individual's employment status at first involvement in terrorism. | 111 (50) | 154 (57) |
| Marital status | Single; married; divorced; widowed; engaged; with partner | Coded at first involvement in terrorism. Categories were exclusive so that an individual coded as "engaged" would not also be coded as "with partner." | 119 (54) | 83 (31) |
| Immigrant status | Present; absent | Coded if the individual lived and worked for a substantial time in a country other than his/her own. | 222 (100) | 269 (100) |
| Conversion to religion | Direct conversion; conversion to a different form of the same religion | Coded only when an individual converted into a particular religion and excluded changes in levels of practice. | 222 (100) | 269 (100) |
| Criminal history | Present; absent | Coded with evidence of criminal activity irrespective of whether or not the individual was arrested or charged. This did not include incidents in which the individual was arrested while campaigning or supporting his/her cause. | 222 (100) | 269 (100) |
| Activist family | Present; absent | Coded when individuals were not merely influenced by family members, but brought up by an "activist family." We defined an activist family as one that regularly shows outward support for a terrorist group, encourages younger members to take action, and often contains other members who are terrorists. We considered the family unit as comprising grandparents, parents, siblings, brothers and sisters of the parents (i.e., uncles, aunts), and cousins. | 116 (52) | 132 (49) |

years ($SD$ = 7.43), which did not differ significantly from the mean age of males within the sample (M = 22.2 years, $SD$ = 6.14), $t(261) = 0.47$, *ns*. The ages of the female terrorists ranged from 12 to 66 years, and the male ages ranged from 13 to 43 years. Although these ranges are large, they correspond to the prediction that the majority of terrorists are young because 233 (83.8%) of all cases fell within the range of 16 to 35 years. Of the remaining 30 terrorists who fell outside this age range, 24 were younger than 16 years at first involvement and six were older than 35 years.

**Education.** Figure 2 shows the highest level of education achieved for 99 female and 143 male terrorists for whom education background was known. As can be seen in Figure 2, the majority of the females completed secondary and tertiary education, contradicting the notion that a lack of education is a prevalent char-

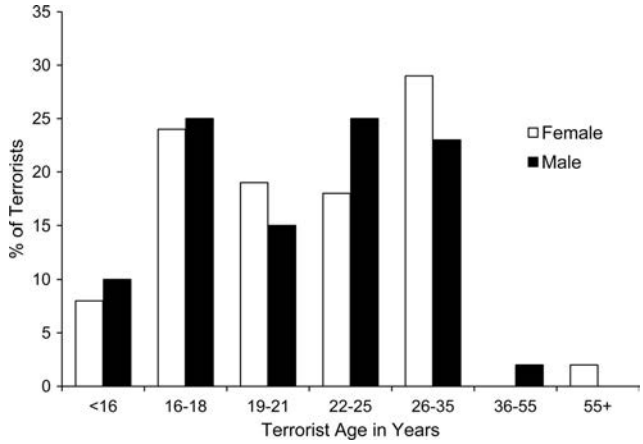



*Figure 1.* Terrorist age as a function of gender.

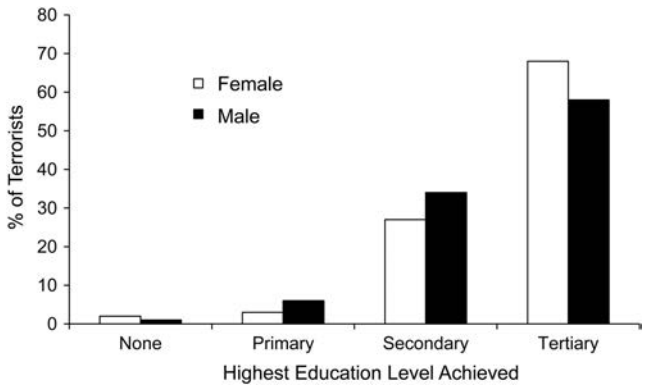



*Figure 2.* Highest education level achieved as a function of gender.

acteristic of female terrorists. Indeed, this level of achievement is considerably higher than the 27.8% of secondary and 14.3% of tertiary education achievement estimated from worldwide data (Barro & Lee, 2001). Moreover, the positive relationship between educational achievement and the proportion of the sample suggests that there is a tendency for female terrorists to achieve a high level of education. This is also true for the male terrorists in the sample given that the differences across gender in the proportion of terrorists achieving secondary and tertiary education were not significant, $\chi^2$s(1) $< 1$, *ns*. As no previous research has examined education level across conflicts, we stratified the data across the 13 represented conflicts to examine diversity. The only conflict in which female education was different from the overall trend was in Nepal, where two of the five female terrorists did not receive any formal education. Although the Nepalese sample in the current data are small, the results are consistent with the low cultural priorities put on female education in Nepal (Onesto, 2005).

**Employment.** Figure 3 shows the employment status of 121 female and 154 male terrorists for whom type of employment at first involvement in terrorism was known. As can be seen from Figure 3, in contrast to our prediction, 244 (92%) terrorists were employed or were still in full-time education when they first became involved in terrorism. There were higher rates of employment for males (72%) than for females (53%), $\chi^2(1) = 11.57$, $p < .01$, $\Phi = .21$, 95% CI [.08, .33], and a nonsignificant trend toward more females than males being students (31% compared with 21%), $\chi^2(1) = 3.46$, $p = .07$, $\Phi = .11$, 95% CI [–.01, .24]. These percentages are comparable to available estimates of worldwide employment (International Labour Office, 2011), which are slightly lower for females (49%) and slightly higher for males (73%).

The conflicts in Chechnya and Iraq differed from the general trend of high employment. Unemployment among terrorists in Chechnya was high among men (16%) and women (9%), and unemployment among terrorists in Iraq was high among men (33%), which is consistent with both the length of the political instability in the two regions and the nature of the conflict that arguably affects higher numbers of the population. However, high levels of unemployment were not seen in other areas experiencing similar conditions (e.g., the Palestinian conflict), suggesting that these two conditions are not sufficient to explain variations in the employment status of female terrorists.

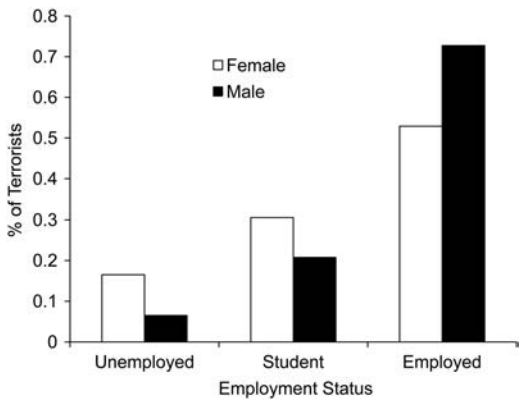



*Figure 3.* Employment status as a function of gender.

## Social Isolation

**Marital status.** Figure 4 shows the marital status of the 119 female and 83 male cases for which marital status was known. As can be seen in Figure 4, in contrast to prediction, the females in our sample were as likely to be married as they were to be single. Specifically, 37% of terrorists were single (39 women and 35 men) and 38% were married (42 women and 35 men), and these proportions did not differ significantly across gender, $\chi^2$s(1) $< 1$, *ns*. In coding terrorists who were not married, we distinguished those who were single from those who were divorced, engaged, widowed, or living with a partner. Analyses across these categories revealed no significant difference in the proportion of male and female terrorists who were in a partnership or engaged, $\chi^2$s(1) $< 1$, *ns*. However, female terrorists were more likely to be divorced than men ($p = .016$, Fisher's exact test, $\Phi = .18$, 95% CI [.02, .21]), and they showed a marginally higher rate of widowhood ($p = .08$, Fisher's exact test, $\Phi = .13$, 95% CI [–.04, .20]). Consistent with our previous analyses, we examined differences in marital status across conflict groups. The majority of groups followed the general trend of equal numbers of single and married terrorists (i.e., within-group chi-square tests across single and married terrorists were nonsignificant at $\alpha = .05$). The two marginal exceptions were the Latin American and Nepalese groups, who showed a tendency to comprise married rather than single women, $\chi^2_{\text{Latin American}}(1, N = 10) = 3.52$, $p = .06$, $\Phi = .15$, 95% CI [.03, .23], and $\chi^2_{\text{Nepalese}}(1, N = 7) = 3.54$, $p = .06$, $\Phi = .15$, 95% CI [.04, .21]. In line with Speckhard and Akhmedova's (2006) findings, there was also a higher rate of widowhood (19%) among the Chechnya females. Indeed, the cases in this group made up 50% of all widowhood within the sample.

**Immigrant status.** To test the hypothesis that immigration is prevalent in female terrorists, we examined the number of immigrants within the data set as a function of gender and group. Of the whole sample, only nine (4%) of the female terrorists were immigrants, which is comparable to the current 3% that is estimated for immigration in 71 countries across the world (World Bank, 2011). An interesting finding was that the rate was higher among men, with 24 (9%) of the male terrorists immigrating before involvement. Together, these immigrants were associated with six conflicts, namely, al-Qaeda (one female, six males), ETA (one female), European groups (one female), Irish Republican Army (IRA; seven males), Latin American groups (four females, seven males), and Palestinian groups, (two females, four males). The prevalence of immigrants in al-Qaeda is unsurprising given the transnational nature of the group (Burke, 2004), and the high occurrence among Latin American groups stems from the fact that several Puerto Ricans in the sample emigrated to the United States before becoming active.

**Religious conversion.** The numbers of converts present within the data set were examined as a function of gender and group. Four women (2%) and 14 men (5%) were identified as converting to a particular religion. A further three women (1%) and six men (2%) were converts to a different strain of the same religion. Of the four direct female converts, three were affiliated with al-Qaeda and one with the Iraqi conflict. All three of the female converts to a different strain of an existing religion were involved in the Chechen conflict. These proportions of conversion are comparable to the 4.5% rate of conversion found in an analysis

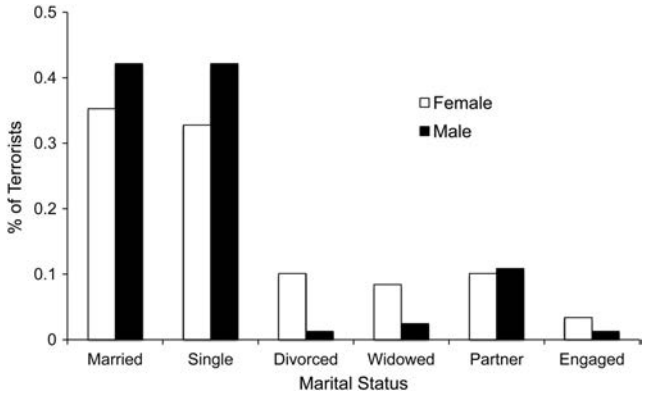



*Figure 4.* Marital status as a function of gender.

of religious conversion across 40 countries (Barro, Hwang, & McCleary, 2010), suggesting that conversion to a religion is not a defining factor in female terrorist etiology.

## Exposure to Criminality

**Criminal history.** To examine the hypothesis that terrorist involvement stems from a criminal career, we coded terrorist biographies to indicate whether or not individuals were arrested for criminal activity prior to their terrorist activity. This analysis revealed little evidence of the anticipated connection between the two, with criminal activity noted in only five of 491 cases (1%; from disparate conflicts within the male sample).

**Activist families.** Exposure to activism was measured at the family level using a yes or no variable, indicating whether or not the terrorist's family was also active in terrorism. Of the 248 cases for which activism was known, 80 (32%) were raised in activist families. Overall, a slightly higher proportion of these were men (34%) than women (30%). However, post hoc analyses of the data showed a more complicated relationship. Of the 80 individuals raised in an activist family, only 49 cases cited family influence as a motivating factor in the decision to carry out terrorist activities. For example, within the IRA, three of the 21 male terrorists and four of 11 female terrorists with an activist family cited family as an influence. Similarly, in the Latin American groups, four of the 10 male terrorists, compared with five of six female terrorists, with an activist family stated family as a motivation.

As with previous analyses, group differences were found in the prevalence of activism among families. Compared with other conflicts, the IRA and the Latin American groups had the highest proportions of activism. Groups with low numbers of both male and female activist families included Aum Shinrikyo, a group that did not exist 20 years ago (Kang, 2009), and the European groups, which were rebelling against the Nazi actions of their parents and resulting political climates (Becker, 1986). Animal and environmental terrorists, who constitute a relatively new and growing form of terrorism (Chalk, Hoffman, Reville, & Kasupski, 2005), also had low numbers of activist families. To examine the role of family influence in long-running conflicts, we correlated the ratio of family activism (i.e., number of activists/number of no activism) with the approximate length of the conflict (i.e., 2011 minus the approximate date the group was formed; see Table 1). There was a positive relationship for female terrorists, $r = .36$, and male terrorists, $r = .41$, suggesting that the number of activist connections decreases with shorter conflict lengths.

## Discussion

In this study, we sought to test broad etiological hypotheses about female-perpetrated terrorism by analyzing key aspects of the backgrounds of females involved in a wide range of terrorist conflicts. By including a control sample of male terrorists, we also were able to differentiate characteristics specific to females from those common to both males and females. Our findings challenge some of the existing stereotypes of female-perpetrated terrorism as well as some of the hypotheses brought forward from research on other offending groups. For example, the characterization of a female terrorist as an isolated individual who lack attachment to a social group (Atran, 2003) was not consistent with the low rates of immigration and single status found within the female data. Similarly, the stereotype of female terrorists as uneducated (Pape, 2005) was not consistent with the positive relationship between the level of education achieved and the frequency of females who had achieved that level. Finally, the finding of high levels of employment in the current sample adds to evidence from studies of male-perpetrated terrorism that suggest that economic hardship is not a prominent risk factor for terrorism (Krueger & Maleckova, 2003).

Collectively these findings add to recent efforts to identify the "psychosocial circumstances" (rather than the psychopathologies) that are common to male involvement in terrorism (Horgan, 2008). Indeed, a number of the factors examined here showed similar patterns of prevalence across males and females. For example, we found parity in the educational achievements of female and male terrorists, with both typically completing secondary education or beyond. Perhaps more surprising is that we also found very few instances of previous involvement in criminality among females and males. This absence of a link between criminality and terrorism contrasts with what is typically found for other types of crime (S. Mullins, 2009). Why such a stark discrepancy? One possible reason that cannot be ruled out is methodological. If terrorists were unwilling to confess to further crimes, or if their criminal activity was hidden from family members who provided the biographical accounts, then this activity would not be recorded in our data. A second, more interesting possibility, however, is that criminality is not linked to terrorism. This may be because criminality is an undesirable characteristic for potential terrorists, given the undue attention it may attract from the authorities. Or, it may simply be that having a criminal career is not a significant precursor to terrorism (cf. female homicide offenders, Putkonen et al., 2011). This possibility is consistent with Rosenthal's (2008) argument that the link between terrorist and criminal careers may be from terrorist to criminal, not criminal to terrorist.

Despite the similarities between male and female terrorists, it would be a mistake to view their etiology as equivalent. Other risk factors we examined showed significant differences across gender, reinforcing the argument that it is important to understand terrorism in gender-specific terms. Compared with their male counterparts, females were less likely to be employed, they were less likely to be converts, and they were less likely to be immigrants. In relation to marriage, we also found that women were more

likely to be widowed or divorced compared with their male counterparts. Collectively, these differences put forward an etiology for females that more heavily emphasizes individual rather than collective (i.e., group) engagement in terrorism. For example, our findings are consistent with the high rates of widowhood and divorce found in Speckhard and Akhmedova's (2006) study of female Chechen suicide terrorists and lend support to their theory of revenge motivations for female Chechen terrorists.

Finally, of course, our data did not discredit all existing accounts of female-perpetrated terrorism. One area in which our data were consistent with previous accounts was in relation to age. We found that approximately 84% of our sample were between 18 and 35 years of age, which is consistent with the idea that terrorism, like many other types of offending, is a "young person's game" (Kanazawa, 2003). It is interesting, however, that there remained a small minority of female and male terrorists who were older than 35 years. This wide range of ages is greater than the more restricted ranges found in smaller male samples (Pape, 2005; Zedalis, 2004), but it is consistent with Berrebi's (2007) study of a large sample of 335 Palestinian terrorists. Thus, it appears that with larger samples comes greater inclusion, which will be important in testing explanations of terrorism engagement.

A second area in which our data support prevailing accounts is in relation to peer activism. Almost one third of the female terrorists in our sample had family connections to terrorism, suggesting that activism among kin may play a role in the involvement of some females. However, the extent to which this is true appears to depend on at least two factors. The first is evidenced by the fact that not all cases cited family activism as a motivation factor in their engagement in terrorism, which leaves open the question of what factors moderate the influence of activism. The second is that the influence of activism on female involvement depended, perhaps not unsurprisingly, on the age of the conflict. This finding emphasizes the importance of social and historic circumstances in people's engagement in terrorism, but it also demonstrates the possibility of finding dimensions that can help us understand differences across multiple conflicts.

Although this study is the first large-scale investigation of female-perpetrated terrorism, the nature of the data and the type of analyses conducted leave open a number of weaknesses. One limitation stems from the fact that the data were from secondary sources. Although every attempt was made to include as many data sources as possible and to ensure the validity of the data through triangulation, there remains the possibility that the data were subjected to reporting bias. One particular bias that will influence these results is that the actions of women are emphasized for journalistic purposes, owing to the fact that society does not relate violence to women (Jacques & Taylor, 2008). However, if this were the case, we might expect to find that the data exaggerated, or at least confirmed, many of the stereotypes about female motivations for engaging in terrorism. Our findings have provided very little support for such hypotheses, suggesting that the data have not been exaggerated in this way.

A second limitation of this research stems from the fact that the sample of male terrorists, although matched whenever possible by group affiliation, was not an exactly matched sample. Our decision to take this approach was based on the assumption that providing the best representation of male and female terrorist backgrounds would provide the least biased, broad picture of this offending group. However, this approach may of course have introduced error into the comparisons of the analysis because differences may relate to variations across conflicts as much as variations across gender. Given the large number of cases used in this study and the variety of sources referenced, this source of error should be minimized. But it is certainly something that needs to be addressed by more detailed research into females' roles in the various conflicts.

A third limitation of this research stems from the scope of the variables examined. Our sampling of eight variables, although guided by theory and past research, provides only a snapshot of the range of factors that may influence an individual's involvement in terrorism. Of course, this sampling was necessary to make the research tractable, just as eyewitness studies consider the effect of only a small number of factors on recall (e.g., cowitnesses, Levett, in press) or deception studies consider a fraction of the possible cues to deceit (e.g., ten Brinke, MacDonald, Porter, & O'Connor, in press). However, it leaves open the possibility that other factors may influence female involvement significantly. Future examination of these factors may lead to alternative conclusions about the value of the explanations. For example, more detailed research on the role of social networks outside of families (cf. Bourman, de Ruiter, & Schene, 2010) may demonstrate a greater role for social influences. Similarly, a more detailed investigation of individual differences in affective and cognitive process (cf. Hayes & O'Reilly, 2011) may give greater credence to the vulnerable demographic explanation.

This study has shown that female terrorists vary considerably in their sociodemographic characteristics, and that those characteristics do not always fit the media stereotypes of female-perpetrated terrorism or the expectations set out by studies of male terrorism and studies of other crime types. The etiology mapped out here can now be further refined by results from primary sources, such as in-depth interviews, and by more detailed comparisons against country-level data on demography and expectations about the role of females in society. Thus, as with other offending groups (Skeem & Monahan, 2011), the results presented here can inform future treatment and research efforts by providing a basis for understanding the nature of female involvement.

## References

Alison, L., Snook, B., & Stein, K. (2001). Unobtrusive measurement: Using police information for forensic research. *Qualitative Research, 1,* 241–254. doi:10.1177/146879410100100208

Atran, S. (2003, March 7). Genesis of suicide terrorism. *Science, 299,* 1534–1539. doi:10.1126/science.1078854

Bakker, E. (2006). *Jihadi terrorists in Europe, their characteristics and the circumstances in which they joined the jihad: An exploratory study.* Clingendael, Netherlands: Netherlands Institute of International Relations. Retrieved from http://www.clingendael.nl/publications/2006/20061200_cscp_csp_bakker.pdf

Barro, R. J., Hwang, J., & McCleary, R. (2010). Religious conversion in 40 countries. *Journal for the Scientific Study of Religion, 49,* 15–36. doi:10.1111/j.1468-5906.2009.01490.x

Barro, R. J., & Lee, J.-W. (2001). International data on educational attainment: Update and implications. *Oxford Economic Papers, 3,* 541–563. doi:10.1093/oep/53.3.541

Becker, B. J. (1986). Influence again: An examination of reviews and studies of gender differences in social influence. In J. S. H. M. C. Linn (Ed.), *The psychology of gender: Advances through meta-analysis.* Baltimore, MD: John Hopkins University Press.

Beech, A. R., & Ward, T. (2004). The integration of etiology and risk in sexual offenders: A theoretical framework. *Aggression and Violent Behavior, 10,* 31–63. doi:10.1016/j.avb.2003.08.00

Berrebi, C. (2007). Evidence about the link between education, poverty and terrorism among Palestinians. *Peace Economics, Peace Science and Public Policy, 13,* Article 2. doi:10.2202/1554-8597.1101

Bott, C., Castan, W. J., Dickens, R., Rowley, T., Smith, E., Lark, R., & Thompson, G. (2009). *Recruitment and radicalization of school-aged young by international terrorist groups: Final report.* Arlington, VA: Homeland Security Institute.

Bourman, Y. H. A., de Ruiter, C., & Schene, A. H. (2010). Social ties and short-term self-reported delinquent behaviour of personality disordered forensic outpatients. *Legal and Criminological Psychology, 15,* 357–372. doi:10.1348/135532509X444528

Burke, J. (2004). *Al-Qaeda: The true story of radical Islam.* London, England: Penguin.

Chalk, P., Hoffman, B., Reville, R., & Kasupski, A.-B. (2005). *Trends in terrorism: Threats to the United States and the future of the Terrorism Risk Insurance Act.* RAND Center for Terrorism Risk Management Policy. Retrieved from http://www.rand.org/pubs/monographs/2005/RAND_MG393.pdf

Cunningham, K. J. (2003). Cross-regional trends in female terrorism. *Studies in Conflict and Terrorism, 26,* 171–195. doi:10.1080/10576100390211419

Donohue, W. A., & Taylor, P. J. (2003). Testing the role effect in terrorist negotiations. *International Negotiation, 8,* 527–547. doi:10.1163/1571806031310789

Eagly, A. H., & Wood, W. (1999). The origins of sex differences in human behavior: Evolved dispositions versus social roles. *American Psychologist, 54,* 408–423. doi:10.1037/0003-066X.54.6.408

Ehrlich, P., & Liu, J. (2002). Some roots of terrorism. *Population and Environment, 24,* 183–192. doi:10.1023/A:1020700221602

Eke, A. W., Seto, M. C., & Williams, J. (2011). Examining the criminal history and future offending of child pornography offenders: An extended prospective follow-up study. *Law and Human Behavior, 35,* 466–478. doi:10.1007/s10979-010-9252-2

Gannon, T. A., & Barrowcliffe, E. (2012). Firesetting in the general population: The development and validation of the Fire Setting and Fire Proclivity Scales. *Legal and Criminological Psychology, 17,* 105–122. doi:10.1348/135532510X523203

Gannon, T. A., Rose, M., & Ward, T. (2008). A descriptive model of the offense process for female sexual offenders. *Sexual Abuse, 20,* 352–374. doi:10.1177/1079063208322495

Giebels, E., & Taylor, P. J. (2009). Interaction patterns in crisis negotiations: Persuasive arguments and cultural differences. *Journal of Applied Psychology, 94,* 5–19. doi:10.1037/a0012953

Gill, P. (2007). A multi-dimensional approach to suicide bombing. *International Journal of Conflict and Violence, 1,* 142–159. doi:urn:nbn:de:0070-ijcv-2007246

Gottschalk, M., & Gottschalk, S. (2004). Authoritarianism and pathological hatred: A social psychological profile of the Middle Eastern terrorist. *The American Sociologist, 2,* 38–59. doi:10.1007/BF02692396

Hamilton, C. (2007). *Women and ETA: The gender politics of radical Basque nationalism.* Manchester, England: Manchester University Press.

Hayes, J. M., & O'Reilly G. (2011). Psychiatric disorder, IQ, and emotional intelligence among adolescent detainees: A comparative study. *Legal and Criminological Psychology*. Advance online publication. doi:10.1111/j.2044-8333.2011.02027.x

Hickle, K. E., & Roe-Sepowitz, D. E. (2010). Female juvenile arsonists: An exploratory look at characteristics and solo and group arson offences. *Legal and Criminological Psychology, 15,* 385–399. doi:10.1348/135532509X473913

Horgan, J. (2005). *The psychology of terrorism.* London, England: Routledge.

Horgan, J. (2008). From profiles to pathways and roots to routes: Perspectives from psychology on radicalization into terrorism. *The ANNALS of the American Academy of Political and Social Science, 618,* 80–94. doi:10.1177/0002716208317539

Horgan, J., & Braddock, K. (2010). Rehabilitating the terrorists? Challenges in assessing the effectiveness of de-radicalization programs. *Terrorism and Political Violence, 22,* 267–291. doi:10.1080/09546551003594748

International Labour Office. (2011). *Global employment trends 2011: The challenge of a jobs recovery.* Geneva, Switzerland: Author.

Issacharoff, A. (2006). The Palestinian and Israeli media on female suicide terrorists. In Y. Schweitzer (Ed.), *Female suicide bombers: Dying for equality?* (pp. 43–50). Tel Aviv, Israel: Jaffee Centre for Strategic Studies. Retrieved from http://www.tau.ac.il/jcss/memoranda/memo84.pdf

Jacques, K., & Taylor, P. J. (2008). Male and female suicide bombers: Different sexes, different reasons? *Studies in Conflict and Terrorism, 31,* 306–326. doi:10.1080/10576100801925695

Jacques, K., & Taylor, P. J. (2009). Female terrorism: A review. *Terrorism and Political Violence, 21,* 499–515. doi:10.1080/09546550902984042

Kanazawa, S. (2003). Why productivity fades with age: The crime–genius connection. *Journal of Research in Personality, 37,* 257–272. doi:10.1016/S0092-6566(02)00538-X

Kang, J. H. (2009). 1995 Tokyo subway attack: The Aum Shinrikyo case. In M. R. Haberfeld & A. V. Hassell (Eds.), *A new understanding of terrorism. Case studies, trajectories and lessons learned* (pp. 219–232). New York, NY: Springer.

Kimhi, S., & Even, S. (2004). Who are the Palestinian suicide bombers? *Terrorism and Political Violence, 16,* 815–840. doi:10.1080/095465590899740

Krueger, A., & Maleckova, J. (2003). Education, poverty and terrorism: Is there a causal connection? *Journal of Economic Perspectives, 17,* 119–144. doi:10.1257/089533003772034925

Levett, L. M. (in press). Co-witness information influences whether a witness is likely to choose from a lineup. *Legal and Criminological Psychology.* doi:10.1111/j.2044-8333.2011.02033.x

Levine, M., Taylor, P. J., & Best, R. (2011). Third parties, violence and conflict resolution: The role of group size and collective action in the microregulation of violence. *Psychological Science, 22,* 406–412. doi:10.1177/095679761139849

Makarenko, T. (2004). The crime–terror continuum: Tracing the interplay between transnational organized crime and terrorism. *Global Crime, 6,* 129–145. doi:10.1080/1744057042000297025

Mathison, S. (1988). Why triangulate? *Educational Researcher, 17,* 13–17. doi:10.3102/0013189X017002013

Mili, H. (2006). Al-Qaeda's Caucasian foot soldiers. *Terrorism Monitor, 4*(21). Retrieved from http://www.jamestown.org/programs/gta/single/?tx_ttnews%5Btt_news%5D=948&tx_ttnews%5BbackPid%5D=181&no_cache=1

Mullins, C. W., & Young, J. K. (2012). Cultures of violence and acts of terror: Applying a legitimation–habituation model to terrorism. *Crime & Delinquency, 58,* 28–56. doi:10.1177/0011128710364807

Mullins, S. (2009). Parallels between crime and terrorism: A social psychological perspective. *Studies in Conflict and Terrorism, 32,* 811–830. doi:10.1080/10576100903109776

Oehme, C. G. (2008). Terrorists, insurgents, and criminals: Growing nexus? *Studies in Conflict and Terrorism, 31,* 80–93. doi:10.1080/10576100701767130

Onesto, L. (2005). *Dispatches from the people's war in Nepal.* London, England: Pluto Press.

Pape, R. (2005). *Dying to win: The strategic logic of suicide terrorism.* New York, NY: Random House.

Prentice, S., Taylor, P. J., Rayson, P., Hoskins, A., & O'Loughlin, B. (2011). Analyzing the semantic content and persuasive composition of extremist media: A case study of texts produced during the Gaza conflict. *Information Systems Frontiers, 13,* 61–73. doi:10.1007/s10796-010-9272-y

Putkonen, H., Weizmann-Henelius, G., Lindberg, N., Rovamo, T., & Häkkänen-Nyholm, H. (2011). Gender differences in homicide offenders' criminal career, substance abuse and mental health care: A nationwide register-based study of Finnish homicide offenders 1995–2004. *Criminal Behaviour and Mental Health, 21,* 51–62. doi:10.1002/cbm.782

Reinares, F. (2004). Who are the terrorists? Analyzing changes in sociological profile among members of ETA. *Studies in Conflict and Terrorism, 27,* 465–488. doi:10.1080/10576100490519741

Rosenthal, J. (2008). For-profit terrorism: The rise of armed entrepreneurs. *Studies in Conflict and Terrorism, 31,* 481–498. doi:10.1080/10576100802064858

Sageman, M. (2004). *Understanding terror networks.* Philadelphia, PA: University of Pennsylvania Press.

Schweitzer, Y. (2006). Palestinian female suicide bombers: Reality vs. myth. In Y. Schweitzer (Ed.), *Female suicide bombers: Dying for equality?* (pp. 25–41). Tel Aviv, Israel: Jaffee Centre for Strategic Studies. Retrieved from http://www.tau.ac.il/jcss/memoranda/memo84.pdf

Shelley, L. (2008). Youth, crime and terrorism. In M. D. Ulusoy (Ed.), *Political violence, organized crimes, terrorism and youth* (pp. 133–141). Amsterdam, Netherlands: IOS Press.

Shelley, L. I., & Picarelli, J. T. (2006). Methods and motives: Exploring links between transnational organized crime and international terrorism. *Trends in Organized Crime, 9,* 52–67. doi:10.1007/s12117-005-1024-x

Silke, A. (2001). The devil you know: Continuing problems with research on terrorism. *Terrorism and Political Violence, 13,* 1–14. doi:10.1080/09546550109609697

Skeem, J. L., & Monahan, J. (2011). Current directions in violence risk assessment. *Current Directions in Psychological Science, 20,* 38–42. doi:10.1177/0963721410397271

Speckhard, A., & Akhmedova, K. (2006). Black widows: The Chechen female suicide terrorists. In Y. Schweitzer (Ed.), *Female suicide bombers: Dying for equality?* (pp. 63–80). Tel Aviv, Israel: Jaffee Centre for Strategic Studies. Retrieved from http://www.tau.ac.il/jcss/memoranda/memo84.pdf

Storey, J. E., Hart, S. D., Meloy, J. R., & Reavis, J. A. (2009). Psychopathy and stalking. *Law and Human Behavior, 33,* 237–246. doi:10.1007/s10979-008-9149-X

Taylor, D. M., & Lewis, W. (2004). Terrorism and the quest for identity. In F. M. Moghaddam & A. J. Marsella (Eds.), *Understanding terrorism: Psychosocial roots, consequences, and interventions* (pp. 169–185). Washington, DC: American Psychological Association.

ten Brinke, L., MacDonal, S., Porter, S., & O'Connor, B. (2012). Crocodile tears: Facial, verbal, and body language behaviours associated with genuine and fabricated remorse. *Law and Human Behavior, 36,* 51–59. doi:10.1037/h0093950

Von Knop, K. (2007). The female jihad: Al Qaeda's women. *Studies in Conflict and Terrorism, 30,* 397–414. doi:10.1080/10576100701258585

Welfare, H., & Hollins, C. R. (2012). Involvement in extreme violence and violence-related trauma: A review with relevance to young people in custody. *Legal and Criminological Psychology, 17,* 89–104. doi:10.1111/j.2044-8333.2010.02002.x

Wilson, M. (2000). Toward a model of terrorist behavior in hostage-taking incidents. *Journal of Conflict Resolution, 44,* 403–424. doi:10.1177/0022002700044004001

World Bank. (2011). *Migration and remittances: Factbook 2011* (2nd ed.). Washington, DC: Author.

Zedalis, D. (2004). *Female suicide bombers* [Electronic version]. Retrieved from http://www.au.af.mil/au/awc/awcgate/ssi/zedalis.pdf

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