

Tinker, tailor, engineer, jihadi...

Spotting Islamic terrorists in the making is a near-impossible task, but **Diego Gambetta** and **Steffen Hertog** reckon that we are beginning to get some clues from the subjects that people study at university or college

WHO becomes a terrorist? An MI5 report leaked to London newspaper *The Guardian* in August 2008 concluded that there is no easy way to identify those who become involved in terrorism in the UK because there is “no single pathway to violent extremism” and that “it is not possible to draw up a typical profile of the ‘British terrorist’ as most are ‘demographically unremarkable’”.

The extraordinary lengths the German authorities went to after 9/11 to track down potential terrorists are a stark example of how useless profiling can be. They collected and analysed data on over 8 million individuals living in Germany. These people were categorised by demographic characteristics: male, aged 18 to 40; current or former student; Muslim; legally resident in Germany; and originating from one of 26 Islamic countries. Then they were sorted into three further categories: potential to carry out a terrorist attack (such as a pilot’s licence); familiarity with locations that could be targets (such as working in airports, nuclear power plants, chemical plants, the rail service, labs and other research institutes); and studying the German language at the Goethe Institute.

With the help of these categories authorities whittled the 8 million down to just 1689 individuals, who were then investigated, one by one. Giovanni Capoccia, an Oxford-based political scientist who analysed this case, reported that not one of them turned out to be a threat. All the real Islamic terrorists

PROFILE

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arrested in Germany through other investigations were not on the official “shortlist” and did not fit the profile.

Does it follow, as some scholars now think, that anyone, given the right conditions and the wrong friendships, can end up joining a terrorist group? Not entirely. We found that engineers are three to four times as likely as other graduates to be present among the members of violent Islamic groups in the Muslim world since the 1970s. Using a sample of 404 Islamic militants worldwide (with a median birth date in 1966), we tracked down the education of 284. Of these, 26 had less than secondary education, 62 completed secondary education (including madrasas),

and 196 had higher education, whether completed or not. Even if none of the cases where we lack data had higher education, the share of those with higher education would be a hefty 48.5 per cent.

The next move was to find out what they had studied – and we tracked down 178 of our 196 cases. The largest single group were engineers, with 78 out of 178, followed by 34 taking Islamic studies, 14 studying medicine, 12 economics and business studies, and 7 natural sciences. The over-representation of engineers applies to all 13 militant groups in the sample and to all 17 nationalities, with the exception of Saudi Arabia.

Our finding holds up quite well in another sample of 259 Islamic extremists who are citizens or residents of 14 western, mostly European, countries, and who have recently come to the attention of the authorities for carrying out or plotting a terrorist attack in the west. Although this sample contains far fewer people with higher education than the older members of the first group, nearly 6 out of 10 of those with higher education are engineers.

We also collected data on non-Muslim extremists. We found that engineers are almost completely absent from violent left-wing groups, while they are present among

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violent right-wing groups in different countries. Out of seven right-wing leaders in the US whose degrees we were able to establish, four were engineers: for example, Richard Butler, the founder of the neo-Nazi group Aryan Nations, was an aeronautical engineer, and Wilhelm Schmitt, leader of the right-wing, extreme anti-government, pro-localism group known as the Sheriff’s Posse Comitatus, was an engineer with Lockheed Martin. Among the total membership of the Islamic groups, however, the over-representation is still much higher.

This could be a coincidence: if the group founders are engineers they would also be more likely to recruit other engineers via their educational or professional networks. This explanation only works up to a point. It does not explain why engineers are over-represented in groups in which the founders were not engineers, or why the founders of groups that were not in contact with each other were often engineers.

Why engineers? Everybody’s first reaction is that they are recruited for their technical proficiency in bomb-making and communications technology, but there is no evidence for this. A tiny elite tends to do the technical work in these groups, and jihadist recruitment manuals focus on a personality profile rather than technical skills.

So we are left with two hypotheses: either certain social conditions impinge more on engineers than on other graduates, or engineers are more likely to have certain personality traits that make radical Islamism more attractive to them. Our best guess is that the phenomenon derives from a combination of these two factors.

With engineers in the Middle East we have very intelligent, ambitious students who have found it difficult to find professional satisfaction, both individually and collectively in their desire to help their countries develop. Graduates of very selective degree programmes, they may have endured relatively greater frustration in a stagnant and authoritarian environment.

The fact that engineers are not over-represented in Saudi Arabia offers some support for this, for, alone among the countries of origin of terrorists, Saudi Arabia has had a shortage of engineers and has thus offered better employment opportunities. However, even in western countries and south-east Asia, where labour market opportunities are better for all graduates, engineers appear relatively more attracted to violent Islamist groups than other graduates. Why is this?

We reckon that something else is going on, something at the individual level, that is, relating to cognitive traits. According to polling data, engineering professors in the US are seven times as likely to be right-wing and religious as other academics, and similar biases apply to students. In 16 other countries we investigated, engineers seem to be no more right-wing or religious than the rest of the population, but the number of engineers combining both traits is unusually high. A lot of piecemeal evidence suggests that characteristics such as greater intolerance of ambiguity, a belief that society can be made to work like clockwork, and dislike of democratic politics which involves compromise, are more common among engineers.

So the bottom line is that while the probability of a Muslim engineer becoming a violent Islamist is minuscule, it is still be between three and four times that for other graduates. ■



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