



## Can monitoring social media predict lone wolf attackers?

### As terrorist attacks increase in Israel, researchers look to Facebook and Twitter for signs of deadly intentions



[Gabriel Avner](#) / October 13, 2015

As the rash of attacks throughout Israel continues into its second week, many Israelis are left with feelings of vulnerability as they contend with the randomness of the violence. The series of stabbings and other attacks have been carried out by a wide variety of people, including men and women in ages ranging from as young as 13 years old.

Jerusalem's Mayor Nir Barkat has blamed posts on social media outlets like Facebook and Twitter for inciting the attackers. While Barkat is not alone in looking at [social media](#) as a factor driving the violence, some experts believe that it can also be used to help identify potential attackers and prevent future violence.

In speaking with **Gabi Siboni**, the Director of Military and Strategic Affairs and Cyber Warfare programs at the **Institute for National Security Studies (INSS)** in Tel Aviv, he says that it is possible to identify potential attackers through social media by using analytical tools to sort through [Big Data](#) sources. He notes that one of the crucial elements in making this approach successful is the ability to recognize suspects' behavioral patterns. In marking these patterns, **Siboni** says that investigators can develop a methodology that could raise red flags in seeking out attackers.

**Siboni** explains that while he is unsure of the utility of this method in tackling the current wave of attacks, he says that in cases involving suicide bombers, researchers have identified recognizable modes of action that indicate suspects as higher risk for violence.

One such action, he notes, is for religious Muslims before a suicide attack to pay off debts and bid goodbye to family and friends. Using these markers, intelligence collectors could look for individuals posting farewell messages on their social media feeds, thus highlighting that person as a potential attacker.

#### Using magnets to seek out the needle in the haystack

Adding to the call for new approaches in identifying terrorists is Prof. Yair Neuman of Ben Gurion University in Be'er Sheva. His recent work has focused on mass shootings in the United States that were carried out by lone wolf attackers. Neuman, who is a researcher at the university's Homeland Security Institute, says that security

professionals can significantly reduce the haystack of potential suspects to create priority lists. He cites social media along with content analysis, criminal records, family status, and other forms of background knowledge to build profiles of high risk individuals that warrant further tracking by authorities.

One of the biggest hurdles for the security establishment in identifying real threats is cutting through the cacophony of background noise on social media. Neuman notes that while many people may express anger over a given grievance, there are often special markers in how the lone wolf attackers will express themselves online. He gives the example of how some of the attackers over the past week have spoken about women in their posts, claiming that they needed to carry out their attack in order to defend the honor of Palestinian women and children.

### **Filling in the blanks: the need for increased data points unavailable through social media**

In speaking with both of these researchers, they made it clear that social media without data from additional sources like phone records and other inputs that are only available to government-level actors merely reveals an incomplete picture of a potential suspect. Moreover, Neuman says that factors such as tracking the suspect's movements and purchases, actions which are considerably harder to carry out solely over social media channels, are important for picking up warning signs about a suspicious individual.

[Siboni](#) also points out that in order for a Big Data type solution to be effective, researchers would need to collect large quantities of data from a variety of sources. This kind of effort can take time as the algorithm processes the information, learning which details are relevant for investigators. He adds that the tracking and analysis of this data would need to be done by computers as there would be too much for humans to handle on their own.

### **Pieces of the puzzle**

Identifying lone wolf attackers has become one of the biggest challenges for security officials in places like Israel, Europe, and the United States. Searching for these individuals and preventing these seemingly random attacks can feel like an insurmountable mission as authorities struggle to keep the public safe.

While the use of social media tracking and analysis offers a far from perfect means of tackling the problem, hopefully it can further add to the list of tools available to security professionals and with further development, save lives.

<http://www.geektime.com/2015/10/13/can-monitoring-social-media-predict-lone-wolf-attackers/>