What’s On Terrorists’ Minds? Research Points to Improved Prediction Models

Counter-terrorism officials working to anticipate where and how terrorists are planning their attacks could gain important insights into terrorists’ judgments by modifying the widely held assumption that terrorists are fully rational actors who seek to maximize tangible goals and instead by recognizing that their rationality is limited and that emotional factors of anger and fear could affect their behavior.

Washington, D.C.—Terrorists’ decisions about which targets to attack and how to launch attacks are driven by a variety of emotional factors that are not well reflected in counter-terrorism modeling used to predict suicide bombings and other terrorist actions, according to a new study that challenges current assumptions employed by terrorism analysts and suggests ways to achieve more accurate assessments.

The new study by researchers Sumitra Sri Bhashyam, a Research Associate at consulting firm Evidera (UK), and Gilberto Montibeller, a Professor of Management Science at Loughborough University (UK)—In the Opponent’s Shoes: Increasing the Behavioral Validity of Attackers’ Judgments in Counter-Terrorism Models—thoroughly explores the current trend in modeling terrorists’ judgments. That trend assumes people who commit such acts are “fully rational” in striving to achieve goals as efficiently and effectively as possible. The study, which recently appeared in the online version of Risk Analysis, a publication of the Society for Risk Analysis, urges counter-terrorism modelers to consider how terrorists’ preferences are affected by “emotions and visceral factors” that influence their decisions about short- and long-term goals.

The study is an outcome of Dr. Sri Bhashyam’s PhD research, supervised by Prof. Montibeller (who is an expert on the prioritization of emerging threats), and conducted when both were affiliated with the Decision Sciences Team at the London School of Economics and Political Science (LSE). Drawing widely from such fields as behavioral decision research, politics, philosophy of choice, and conflict management in terrorism, Sri Bhashyam and Montibeller propose modifications in the assumptions used by counter-terrorism risk analysts to make models conform more closely to what actually is known about terrorists’ motivations and judgments. Current models are incomplete in their key assumptions that terrorists only seek to maximize economic or damaging impacts, that they have well-established and stable preferences, and that they view the probabilities of achieving success of their actions objectively.
According to Sri Bhashyam and Montibeller, there are different types of terrorists who cannot be assumed to operate in a fully rational way. Although “sympathizers” can be assumed to fit current rational decision making models, such rationality does not hold in many instances for “active” and “suicidal” terrorists, whose profiles are based on research (for example, the understanding of suicidal terrorists’ motivations are based on secondary research on interviews with failed suicidal terrorists). Active terrorists—including leaders—can be “impulsive, emotionally unstable and are prone to externalize their emotions,” such as anger. Suicidal terrorists, on the other hand, “seek care and guidance from stronger personality figures” and “benefit” from the attention accompanying martyrdom.

Based on their acute analysis, the authors note that “passions and visceral factors influence an agent to behave extremely myopically and to seek immediate rewards, disregarding any detrimental effects.” As such, the authors recommend that counter-terrorism modelers consider terrorists as myopic decision makers. Terrorists also should be considered as subject to clouded objectives due to irrational visceral factors; for example, in anger, agents become risk-seeking (comparable to road rage). The authors also provide an extensive table of “social objectives” associated with terrorism that should be given more weight in counter-terrorism models than straightforward political gain. In addition, terrorists’ risk attitude should be considered, with fearful terrorists being risk-averse and angry terrorists being risk-prone. Lastly, terrorists’ biased estimates when “assessing the performance of certain strikes and their likelihood of success” can be worsened by visceral factors, and this factor should be incorporated into models to improve the descriptive validity of attackers’ judgments.

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