

Institution: University College London		
Unit of Assessment: 20 Social Work and Social Policy		
Title of case study: Improving Violent Extremist Risk Assessment and Management Processes		
Period when the underpinning research was undertaken: 2012-2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Paul Gill Noémie Bouhana	Professor Associate Professor	2012-present 2006-present
Period when the claimed impact occurred: 2014-2020		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact (indicative maximum 100 words)		
<p>Risk assessment and management are core to counter-terrorism practices worldwide, influencing the outcome of almost every referral into counter-terrorism practice, from those deemed unsuitable for intervention, to those in prison for terrorist offences. By providing a scientific evidence base for risk factors and protective factors, the co-creation of innovative research with security-focused agencies and evaluation of practice, Gill and Bouhana's research has been the central focus for extremist risk assessment and management worldwide. By influencing counter terrorism policing policy and practice, the team's work has underpinned risk assessment tools and strategies for the UK Counter Terrorism Unit's PREVENT and ACTEarly campaigns, and the worldwide Terrorist Radicalization Assessment Protocol (TRAP-18), while incorporating the use of multi-agency approaches and evidence for organisations including Fixated Threat Assessment Centres in both the UK and Australia, and the US Department of Homeland Security.</p>		
2. Underpinning research (indicative maximum 500 words)		
<p>Gill and Bouhana's research in the field of violent extremism studies is unique in terms of its genuine multi-disciplinarity (e.g. crime science, life-course criminology, psychology, political science and geography), innovative research questions, robust analytical approaches, significant collaborations with crime/security agencies and real-world impact. Their work is the international reference on violent extremist risk assessment and management, in terms of who engages in violent extremism (in particular lone-actor terrorism) and concerns the application of criminological paradigms to understanding radicalisation and terrorist behaviour. Both are fundamental to the real-world practice of violent extremist risk assessment and management. Prior to Gill and Bouhana's extensive contributions, work on lone-actor terrorism was empirically, conceptually and theoretically weak. Their research stems from the basic idea that terrorist behaviour should be examined in the same way crime science has examined criminal behaviour through robust, problem-oriented and interdisciplinary science. In terms of empirical research, the lone-actor terrorist datasets maintained by Gill and Bouhana are the richest repositories of information on individual offenders within the field.</p> <p>The descriptive analysis (via coding) of 119 lone actor terrorists, using all publicly available information, categorised over 180 behaviours of interest [R1], demonstrating the lack of a uniform socio-demographic profile of lone actors and encouraging a focus on behaviour to inform risk assessment. As the first paper also to demonstrate the high degree to which other people generally knew about the offender's grievance, extremist ideology, views and/or intent to engage in violence, or 'leakage' of information, the paper noted a range of other intervention opportunities including via mental health professionals. A potential concern, however, with operationalising the findings from [R1] in practice, was that the data was solely based on open-source information. In 2019, [R2] acted to replicate this study, but with closed source data from police and intelligence files, in collaboration with front-line practitioners at Greater Manchester Police. This was the first published analysis of violent extremism utilising UK police and intelligence data. The results served as a validation of [R1]'s key findings and offered additional novel insights into a range of factors including forms of criminal histories prior to terrorism, a finer-grained understanding of</p>		

online behaviours associated with radicalisation, and hostile reconnaissance of attack sites. As part of the Commission for Countering Extremism, Bouhana built a framework for researchers and practitioners to understand the basis on which risk of violent extremism should be assessed [R3], integrating evidence relating to the characteristics of people who adopt extremist beliefs and engage in extremist behaviours, and the situations where this occurs. The findings recommended that an effective counter-extremism strategy must adopt a systemic perspective to address the emergence of the moral ecologies that foster extremism.

The situational qualities of terrorist behaviour (e.g. what terrorists do and how they do it) were examined in [R4]. This was the first paper to attempt to understand first-hand accounts of terrorist decision-making in the context of the risks they faced. Analysing over 90 primary accounts of life in a terrorist group, [R4] outlined what the cost-benefit decision-making processes look like in a terrorist attack, the types of security features of a scene that are considered (CCTV, police patrols) and the routes through which terrorists are detected, denied key pieces of information, deterred and disconcerted in the build up to attacks. Whilst [R1] unexpectedly demonstrated the high degree to which lone-actor terrorists had histories of mental disorder (which ran contrary to thinking at the time), [R5] went further and showed that lone-actors were 13.4 times more likely to have a mental disorder diagnosis prior to their offending, whilst demonstrating a range of co-morbidities and identified behaviours and traits that security agencies could utilise to monitor and prevent lone-actor terrorism events. In addition, as control group studies were extremely rare in terrorism studies, the resulting lack of base rate information from the general population is a consistent problem for the development of putative risk and protective factors for violent extremism engagement. [R6] was the first study of its type to collect this data, through an online survey of over 2000 respondents, who were asked to self-report upon the same 180+ variables collected and analysed in other studies [R1, R2 and R5]. The results were compared with lone-actor terrorist data. Lone-actor terrorists were significantly more likely to display cognitive vulnerabilities, low self-control, and indicators of violence-supportive moralities. The general population was much more likely to experience greater levels of distal stressors but was also more likely to experience factors considered protective against offending (e.g. university experience). The results provide empirical evidence for the consideration of protective factors in violent extremist risk assessment, which to date have largely been overlooked.

3. References to the research (indicative maximum of six references)

- R1.** Gill, P., Horgan, J., & Deckert, P. (2014). Bombing alone: Tracing the motivations and antecedent behaviors of lone-actor terrorists. *Journal of Forensic Sciences*, 59(2), 425-435. <https://doi.org/10.1111/1556-4029.12312>. **Paper cited over 440 times, most cited paper in the journal since 2011.**
- R2.** Gill, P., Corner, E., McKee, A., Hitchen, P., & Betley, P. (2019). "What Do Closed Source Data Tell Us About Lone Actor Terrorist Behaviour? The Preliminary Findings from Project Regulus". *Terrorism and Political Violence*. <https://doi.org/10.1080/09546553.2019.1668781>.
- R3.** Bouhana, N. (2019) "The Moral Ecology of Extremism: A Systemic Perspective". London: UK Commission for Countering Extremism. Available upon request.
- R4.** Gill, P., Marchment, Z., Corner, E., and Bouhana, N. (2018) "Terrorist Decision-Making in the Context of Risk, Attack Planning and Attack Commission". *Studies in Conflict and Terrorism*, 43(2), 145-160. <https://doi.org/10.1080/1057610X.2018.1445501>. **The paper has been viewed over 11,000 times online and has a field weighted citation index of 13.53.**
- R5.** Corner, E., & Gill, P. (2015). A false dichotomy? Mental illness and lone-actor terrorism. *Law and Human Behavior*, 39(1), 23-34. <http://dx.doi.org/10.1037/lhb0000102>. **Paper cited 247 times, most cited paper in the journal since 2013.**
- R6.** Clemmow, C., Schumann, S., Salman, N. L., & Gill, P. (2020). The base rate study: developing base rates for risk factors and indicators for engagement in violent extremism. *Journal of forensic sciences*, 65(3), 865-881. <https://doi.org/10.1111/1556-4029.14282>.

R7. Meloy, J. R., & Gill, P. (2016). The lone-actor terrorist and the TRAP-18. *Journal of Threat Assessment and Management*, 3(1), 37. <https://doi.org/10.1037/tam0000061>.

This lone-actor terrorist research was underpinned by projects funded by the Defence Science and Technology Laboratory (Defence Science and Technology Laboratory), the National Institute of Justice, Centre for Research and Evidence on Security Threats (CREST; GBP75,000 + GBP483,000), the European Union and the European Research Council worth over EUR6,000,000. This includes the PRIME grant (EUR3,000,000) which was highlighted as an EU Research & Innovation Success Story (<https://bit.ly/3cEB2Dv>).

4. Details of the impact (indicative maximum 750 words)

Consistent with the applied nature of crime science, Gill and Bouhana's research involves collaborating with practitioners conducting violent extremist risk assessment and management. Impacts emanated from research that Gill and Bouhana were directly commissioned to undertake (Centre for the Protection of National Infrastructure, the U.S. National Institute of Justice), from the co-creation of research with frontline practitioners (Greater Manchester Police, the Fixated Threat Assessment Centre, and the FBI), and through practitioners becoming aware of Gill and Bouhana's work and embedding these results in policy and practice. These impacts range from guiding early prevention efforts, through to active risk management in ongoing cases (**S1-7**).

Influencing International Counter Terrorism Organisations

Gill and Bouhana's research demonstrates the similar genesis of violent extremism and other forms of targeted violence (e.g. mass shootings) [**R1/R2/R3/R5**]. Between 2019-2020, after a series of personal briefings from Gill to the Office for Targeted Violence and Terrorism Prevention in the US Department of Homeland Security (DHS), the DHS stated "*The findings served as some of the first evidence that violence prevention programs should not limit their focus to targeted violence or terrorism, but rather should address both...The findings and subsequent updates...undergird the practice of...the Office for Targeted Violence and Terrorism Prevention*" (**S1**). The Office was tasked with developing a new definition of targeted violence for the DHS where Gill's personal briefings on this issue "*likely saved...at least a month of research and greatly accelerated the work*" (**S1**). Gill's other briefings on behavioural indicators for grievance-based violence simplified these difficult topics for a cohort of new employees, leaving them with greater clarity in how to approach the prevention of targeted violence and terrorism. This has been evident in their practice since, "*which in turn has greatly improved the practice of prevention*" (**S1**).

Gill and Bouhana's work identified, and in turn verified, risk and protective factors for involvement in violent extremism [**R1-R6**]. The developers of risk assessment tools incorporated these risk factors into their tools, and cited Gill and Bouhana's work in their guidance documents. For example, Fixated Threat Assessment Centres in Australia assess and manage lone, fixated persons, who have obsessive preoccupations. In order to do so, they developed a tool called 'The Risk Aide-Mémoire', to prioritise the urgency and intensity of intervention and monitoring requirements. The tool's protocol draws heavily on the UCL team's research in this area particularly in demonstrating (i) "*the relevance of mental health to violent extremism risk assessment and management*" [**R5**] and (ii) that "*often other parties such as family members and friends had observed changes in...mental state and behaviour, highlighting potential opportunities...to intervene before the violence*" [**S2, R1/R2**]. The Risk Aide-Mémoire has been used in more than 2,000 cases to assess behaviour, motivations, mental states and the risk of radicalisation (**S2**).

TRAP-18 is the worldwide Terrorist Radicalization Assessment Protocol 18, of which much of the guidance is based on Gill and Bouhana's work on risk factors. The tool helps assess persons of concern for engagement in ideologically-motivated violence, and is used by counter-terrorism and law enforcement officials in Canada, Europe, and the United States. In total, Gill's research [**R1/R2/R5**] on lone-actor terrorists is cited in 10 of 18 risk factors contained within the TRAP-18's guidance manual, whose purpose is to "*help the assessor develop a narrative for understanding the case given the presence or absence of indicators*" (**S3**). Two of these risk factors are

'dependence on the virtual community' and 'leakage'. For the former, [R2] "*provided the most complete analysis of the risk factor*" (S3). For the latter, [R1] was the first to demonstrate a majority of lone-actor terrorists leak their intent prior to the violence and this is their "*Achilles' heel*" in terms of early detection' (S3). After TRAP-18's development, its developer and Gill co-published the most cited paper in *The Journal of Threat Assessment and Management* (R7). "*This paper was the first to demonstrate TRAP-18's applicability to multiple ideologies...advanced the construct validation of the TRAP-18...[and]..contributed toward TRAP-18's validation by the Risk Management Authority*" whose remit is to promote consistent, evidence-based practice for key partners working across criminal justice (S3). TRAP-18 remains the only violent extremist risk assessment tool to hold such validation from the authority, and is therefore deemed the measure against which the practice of violent extremist risk assessment guidance should be judged going forward.

Such close and impactful collaboration has happened elsewhere also. For example, the FBI replicated publication [R1] with their internal data for an ecologically valid understanding of the problem in the U.S. Gill provided scientific input, advice and peer review on this replication (S4).

Underpinning Campaigns and Practices in National Terrorism Units

Gill and Bouhana's work on the leakage of intent to bystanders has been publicly noted by Britain's most Senior Counter-Terrorism Officer, demonstrating "*the need for policing to work with communities to provide those closest to people at risk of being drawn into terrorism to have confidence that early intervention can divert people away from terrorism.*" Gill and Bouhana's body of research "*provides the rationale for why a public health approach is needed*" (S5) in this space, and this is therefore typified in Counter Terrorism Policing's 'ACT Early' safeguarding prevention campaign launched in November 2020, providing advice, guidance and support for adults (parents, carers, teachers) who are concerned a child or young adult they know may be vulnerable to radicalisation. 'ACT Early' is one part of the UK Counter Terrorism Strategy to stop people becoming or supporting a terrorist. In examining the relationship between mental health problems and violent extremism [R1/R2/R7], Gill et al.'s work has been instrumental in setting up Counter Terrorism Vulnerability Hubs (also known as Mental Health Pilot Hubs). Their remit is to identify referrals to Prevent who may have mental health difficulties at the earliest possible opportunity and, where appropriate, assist them in accessing mainstream services for help with hundreds of referrals each year of individuals demonstrating radicalisation concerns alongside mental ill health. The work on mental health problems also led to close research collaborations with the UK Fixed Threat Assessment Centre (FTAC) to assess and manage the threat to public figures from lone individuals with intense, pathological fixations, the majority of whom are mentally ill. The research demonstrated "*the boundaries between [FTAC] casework and [violent extremism] were not so stark.*" UCL researchers were embedded at FTAC, and their analyses of FTAC's case files "*demonstrated particular markers of concern to prioritise in assessment*" and now inform FTAC's "day-to-day risk assessment practice" in approximately 1,000 referrals per year (S6).

Between 2014 and 2017, Gill undertook close collaborative work with the UK's North-West Counter Terrorism Unit (Project Regulus), which led to a co-publication on the antecedent behaviours of 49 lone-actor terrorists based on police files, intelligence and interviews [R2]. Gill was the lead academic and scientific partner on the project. The research helped influence the Counter-Terrorism Network to "*view the threat to national security through the lens of vulnerability and safeguarding*", leading to the creation of an intelligence enhancement framework based on observable and detectable behavioural indicators, feeding directly into "*strategic direction, defensible decision making, case management for the National Counter-Terrorism network*". As noted by the Detective Chief Inspector of Greater Manchester Police, Project Regulus "*became a live national function providing support across the whole U.K. counter-terrorism network...and introduced a commonality of process, consistency of language and template documentation to manage threat and risk*". The collaborative work therefore also "*provided an economic benefit by ensuring cases are managed in an efficient, structured and defensible manner, whilst also providing assurance to the national network*" (S7).

Impact case study (REF3)

In summary, the impact on violent extremist risk assessment and management spans (a) the scientific development and validation of risk and protective factors incorporated into risk assessment tools and procedures applied worldwide (b) the co-creation and direct dissemination of research with practitioner agencies that fed into their internal practice and (c) the evaluation of real-world practice.

5. Sources to corroborate the impact (indicative maximum of 10 references)

- S1.** Testimonial from Director, Office for Targeted Violence and Terrorism Prevention, U.S. Department of Homeland Security
- S2.** Testimonial from Victorian Fixated Threat Assessment Centre
- S3.** Testimonial from Developer of the TRAP-18
- S4.** FBI (2019) Lone Offender: A Study of Lone Offender Terrorism in the United States (1972-2015). Washington, D.C.: U.S. Department of Justice. <https://www.fbi.gov/file-repository/lone-offender-terrorism-report-111319.pdf/view>.
- S5.** Testimonial from Assistant Commissioner & National Lead for CT Policing, Metropolitan Police Service
- S6.** Testimonial from Consultant Forensic Psychiatrist & Clinical Lead, Fixated Threat Assessment Centre
- S7.** Testimonial from Detective Chief Inspector, Greater Manchester Police.