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Psychological Trauma in Terrorism (PT2R): Phase 1 End of Year Report

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Psychological Trauma in Terrorism (PT2R)

Phase 1 End Of Year Report

July 21, 2023

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About the Report. This report summarizes the findings of Phase 1 of the PT2R project, a study in the structural design of terrorism and targeted violence research as a profession. Drawn from qualitative analysis of interviews with 35 active terrorism and targeted violence researchers, this report provides a comprehensive job analysis of terrorism research which can be used to inform future selection, assessment, and training of researchers. Additionally, we explore the issue of exposure to traumatic material as a necessary component of terrorism and targeted violence research and identify job-embedded risk factors for psychosocial harm to researchers.

Questions about this report should be directed to Dr. Matthew Crayne at mcrayne@albany.edu.

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About NCITE. The National Counterterrorism Innovation, Technology, and Education (NCITE) Center was established in 2020 as the Department of Homeland Security Center of Excellence for counterterrorism and terrorism prevention research. Sponsored by the DHS Science & Technology Office of University Programs, NCITE is the trusted DHS academic consortium of over 60 researchers across 26 universities and non-government organizations. Headquartered at the University of Nebraska at Omaha, NCITE is a leading U.S. academic partner for counterterrorism research, technology, and workforce development.

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1.0 EXECUTIVE SUMMARY

Terrorism and targeted violence research are a unique subset of social science topics, requiring scholars to deeply engage with difficult content such as violent imagery and ideological propaganda. To date there has been no effort to determine what, if any, critical knowledge, skills, abilities, and other characteristics (KSAOs) are predictive of success in doing such work. Further, there is little known about how conducting this kind of research may psychologically impact the researchers themselves. The present study sought to address both of these issues through a process of job analytic interviewing, a technique adapted from Industrial/Organizational Psychology. Using a structured interview conducted with 35 terrorism and targeted violence scholars of various ranks and academic backgrounds, we establish the first formal job analysis of terrorism and targeted violence research as a profession. We extend further by directly addressing the incidence, severity, and risk factors for person-level psychosocial trauma caused by on-the-job exposures in terrorism research. We find that terrorism researchers are at a significant risk of traumatic experiences, and their potential long-term consequences, but that few realize or acknowledge so in the course of the jobs. Moreover, there is a distinct difference between the experiences of senior personnel (e.g., primary investigators) and junior personnel (e.g., graduate students), which may have significant consequences both for the mental health of researchers and for efforts to address trauma risk. We conclude by assessing a series of structural, institutional, and cultural risk factors which may contribute to the potential for researcher trauma in the long-term.

2.0 JOB ANALYSIS OF TERRORISM RESEARCH

The findings for Phase 1 of PT2R are the result of a series of 35 structured job analytic interviews with terrorism and targeted violence researchers working in various U.S. and U.K. academic institutions. Please see Appendices A and B for more details regarding the design and analytic approach of the study, including interview protocol design, interviewee recruitment approach, interviewee demographics, a description of the interview protocol, and research limitations.

Job analyses can take many forms but are generally composed of assessments of typical work tasks and the KSAs and individual differences that are associated with successful task completion (Pearlman & Sanchez, 2010). Our research reflects what is known as a combined job analysis technique (C-JAM) in which multiple data sources (archival data and SME interviews) are collated to create a list of job-relevant KSAOs. The following sections follow this standard format, outlining first what are typical work tasks and on-the-job expectations, followed by deep dives into the knowledge, skills, abilities, and individual differences associated with successful performance. Additionally, this report examines the role of personal values and critical experiences as motivators and/or preconditions for pursuing terrorism and targeted violence research as a profession.

Initially, the project team identified 60 KSAOs across the archival review and SME interviews. They then reviewed the KSAOs to determine overlap, and identified and defined a final list of 46 unique KSAOs critical to terrorism researcher performance.

2.1. Description of Method

In this section we briefly review the methods used to generate the combined job analysis (C-JAM).

2.1.1. Archival Records Review

In the initial creation of our structured interview protocol, the project team reviewed prior job analyses in related fields to develop an initial set of KSAOs that were potentially relevant to terrorism and targeted violence research. Given the unique nature of terrorism research as a profession, combining elements of multi-disciplinary academic scholarship and scientific acumen with public policy, administration, and primary source research, identifying a single comparative source was not possible. Instead, the research team used keywords associated with terrorism (e.g., terrorism, violence, military, politics) and research (e.g., scholarship, academic, science) as Boolean search terms to generate potential matches.

Using the O*Net database, which contains the previously validated job analyses of over 1,000 occupations, we searched for close match occupations. The research team then reviewed these occupations for KSAO overlap and selected the occupations which appeared most closely associated to one another as well as to terrorism research, specifically. The initial search yielded seven potential matches, for which profiles were then extracted and analyzed for overlap in KSAOs. Misalignment after this closer review removed two originally selected occupations, police and sheriff's patrol officers and public safety telecommunicators, resulting in a five-occupation preliminary model. These occupations are listed below:

- 1) Social Science Research Assistants
- 2) Political Scientists
- 3) News Analysts, Reporters, and Journalists
- 4) I/O Psychologists
- 5) Emergency Management Directors

Overlapping KSAOs were extracted from these profiles and recorded by the research team, as well as information regarding the job-related context of their importance. These datapoints then served as the foundational basis for questions related to KSAOs in the structured interview.

2.1.2. Subject Matter Expert Interviews

As previously noted, the research team conducted 35 interviews with terrorism and targeted violence SMEs across various institutions, training paradigms, focal areas of interest and expertise, nationality and locale, and level of education.

2.2. C-JAM Results

We present the results of the job analysis in seven categories, with combined results from the archival review and interviews.

2.2.1. Primary Job Tasks, Structure, and Expectations

A series of early questions asked interviewees to report on their “typical” workday, including the physical locations in which their work takes place and the major tasks of their job. The overwhelming consensus across ranks and disciplines is that there is no category of work that could be considered “typical”. Interviewees reported considerable variation in their day-to-day jobs, most often aligned with position and rank. For example, primary investigators in our sample reported a close division of labor between academic tasks (e.g., teaching, 44%¹) and research tasks (e.g., data collection and analysis, 53%). This is contrasted with graduate students for whom academic tasks accounted for 19% of references and research tasks 78%. This organization of labor should be expected given the various competing roles that many academic terrorism researchers are faced with, particularly primary investigators who often have defined academic duties which students and staff do not.

Structurally, terrorism research is often hierarchical with departments and research centers organized around a rank-and-education based coordination of work tasks. The most common rank discrepancy in execution of work tasks is that between primary investigators and graduate students, who are under the direct supervision and academic advisement of the primary investigator in most instances. This structure reveals itself to be important, as more senior researchers are often detached from primary source data collection and review and take more responsibility for analysis, project coordination, and student mentorship. Whereas graduate students dedicated 53% of their responses to discussing study development, data collection, and analysis tasks as comprising their typical workday, primary investigators dedicated only 30% of their responses to the same task set. Moreover, a further 40% of graduate student focus was placed on reading, which is contrasted with only 15% of primary investigator responses. Interviewees noted that reading tasks were often related to the consumption of primary and secondary source materials such as case studies and reports for purposes of data collection, suggesting overlap in time allocation between categories.

Noting the hierarchical discrepancy in work tasks is important for two related reasons. First, if primary data collection and synthesis falls primarily to junior researchers as a population then the likelihood of exposure to distressing or traumatic content is significantly increased as a product of rank. Secondly, the structural disconnect between primary investigators and the ground-level experiences of graduate students and other junior researchers may inadvertently create perceptual barriers which make trauma mitigation less likely. Interviewees noted this issue on several occasions, with graduate students in particular noting that they did not believe their supervisors considered or were even aware of the severity of content they were being asked to regularly engage with on the job. This issue is further discussed in section 3.0 of this report.

¹ These percentages indicate the proportion of coded references to a particular category. In the noted example, the percentage indicates that when asked about their work tasks, primary investigators dedicated 44% of their response to discussion of primarily academic responsibilities.

Apart from research and teaching tasks, terrorism researchers at the primary investigator level are responsible for basic management tasks like project administration and staff supervision. This task set is not distinct from other high-level academic and research positions and requires competencies regularly found in other scientific and management domains. Typical primary investigator work also involves frequent engagement with external stakeholders including collaborators, funders, and practitioners who consume the team's research outputs.

Interviewees consistently report working in physical environments that are office-like, requiring access to computers and the internet. Many interviewees reported a preference for remote work and had therefore constructed home offices. Interviewees noted that a trend towards remote work did create challenges with collaboration, which is sometimes necessary in the execution of research tasks. However, most explicit tasks are conducted on an individual basis and are later synthesized to create a collaborative output (e.g., dataset, manuscript, technical report). Additionally, several interviewees noted that the sensitive nature of the material that they work with requires additional privacy measures. Work in public spaces such as libraries and coffee shops were limited to protect data and study subject security as well as to not arise potential suspicion from onlookers due to subject matter being reviewed. Many decisions about data security, and therefore work location, are derived from an understanding of the expectations of research funders, institutional policies, and occasionally laws and government regulations.

Researchers are expected to produce various deliverables depending on the intended audience, including academic journal articles, conference presentations, datasets, technical reports, and practitioner-oriented tools. These materials are most often prepared by primary investigators, with 20% of work tasks referenced in interviews pertaining to writing and deliverable construction.

In sum, terrorism researchers describe their typical work structure as a combination of research and administrative tasks which vary depending on rank and subject matter but require common skillsets. Work is generally conducted independently, although multi-person collaboration is often necessary for deliverable construction. Tasks are typically organized around institutional position and rank, with most data collection, organization, and analysis falling to more junior researchers. This work is often lacking in outwardly explicit structure, requiring inductive reasoning, and allowing for the use of personal judgment in output production. All work tasks, across research domains, require some degree of formal training and knowledge of subject matter and research methods. Additional specifics in KSAO domains are outlined below.

2.2.2. Knowledge Domain

The knowledge domain represents information about specific areas that terrorism researchers need to have to be successful in their role. Knowledge areas are the general facts and/or principles of a domain/area. In total, the project team identified seven knowledge areas across the archival review and interviews. These were:

- 1) Knowledge of terrorism / targeted violence (general),
- 2) Knowledge of specific subject, group, and/or ideology,
- 3) Knowledge of history,
- 4) Knowledge of politics,
- 5) Knowledge of the threat landscape,
- 6) Knowledge of ethics and the ethical implications of research,
- 7) Knowledge of the technical aspects of research (e.g., data collection, coding, analysis)

We can further reduce these to four critical, thematic knowledge areas. The first is context knowledge, which encompasses fundamental background information regarding the social, historical, and political impetuses for terrorism and targeted violence as well as a general understanding of what terrorism research is likely to entail. Second, we identified specific content knowledge related to the subject, group, ideology, or topic of interest as a critical knowledge area. Technical knowledge was the third critical knowledge area. Finally, the combined sensitivity of terrorism research

data as well as general social science research best practices necessitates ethical knowledge as a critical knowledge area.

2.2.3. Skills Domain

The skills domain represents actions and/or behaviors that develop through practice. Skills not only facilitate actions themselves, but also facilitate learning new information. Because SMEs can confuse skills and abilities, we identified skills and ability domains based on the content described by the interviewee, rather than the labels provided. In aggregating across interviewee descriptions of specific skills, we referred to the language and labels used in O*Net KSAO taxonomies whenever possible for purposes of standardization. After archival and interview content review, we identified thirteen critical skills areas. These are listed below in ranked order of importance based on degree of content match in our analysis.

- 1) Complex problem solving,
- 2) Active learning,
- 3) Critical thinking,
- 4) Active listening,
- 5) Judgment and decision making,
- 6) Reading comprehension,
- 7) Writing and persuasion,
- 8) Speaking skills,
- 9) Organizational skills (e.g., time management),
- 10) Cultural acumen,
- 11) Research methods skills,
- 12) Mathematical and analytical skills,
- 13) Coping skills

In sum, terrorism researchers need a diverse collection of cognitive, interpersonal, and technical skills to perform at a high level. Interviewees described the most effective terrorism researchers as those who can process multi-faceted, complex problems efficiently, organize work around ambiguous and unstructured objectives, and communicate both the rationale and findings of research in a cogent manner. Moreover, terrorism researchers must be aware of the cultural and social implications of their research program as well as adept in managing their reactions to the material they engage with in a psychosocially healthy manner.

2.2.4. Ability Domain

The ability domain represents capacities to act or perform a behavior. These relatively stable attributes facilitate performance. Although it may be possible to improve some abilities with practice, others cannot easily improve and are considered individual differences, a term used by psychologists to describe innate characteristics that vary between people. These characteristics are generally stable and, apart from some rare exceptions, unlikely to change over time. After review and analysis, we identified the following 14 ability domains (listed alphabetically due to an equality of importance across abilities according to our analysis):

1. Category flexibility,
2. Compartmentalization
3. Deductive reasoning,
4. Fluency of ideas,
5. Inductive reasoning,
6. Information ordering,
7. Oral comprehension,

8. Oral expression,
9. Originality,
10. Problem sensitivity,
11. Selective attention,
12. Speech clarity,
13. Written comprehension,
14. Written expression

Taken together, these abilities can be clustered into two thematic areas. The first reflects abilities associated with idea generation and information management, including category flexibility, compartmentalization, deductive and inductive reasoning, information ordering, problem sensitivity, and selective attention. Terrorism researchers need to be able to organize large amounts of disordered information, often across various informational domains, and generate reasonable empirical and theoretical conclusions. The second critical cluster of abilities are related to the need for effective communication of insights drawn from data and information, as well as rationales for generating research ideas or proposing theory. These abilities include fluency of ideas, oral comprehension and expression, originality, speech clarity, and written comprehension and expression.

2.2.5. Personality

Personality traits are descriptive characteristics used to describe patterns or tendencies of thinking, feeling, and behaving across various situations. Personality is an important sub-category of individual differences. Therefore, personality reflects psychological characteristics that are predictive of expected responses to situations and are unlikely to change over time. We have separated our analysis into categories of traits and characteristics associated with productive performance as well as counterproductive performance. In total we identified 12 critical traits across both categories. These are listed below in ranked order of importance based on degree of content match in our analysis.

Productive Personality

1. Attention to detail,
2. Adaptability,
3. Self-confidence,
4. Persistence,
5. Empathy,
6. Integrity,
7. Open-mindedness,
8. Emotional stability

Counterproductive Personality

9. Prejudice,
10. Narcissism,
11. Machiavellianism,
12. Inflexibility

We considered overlap in the description of specific personality traits and drew connections between these and established taxonomies of general personality, namely the Five Factor Model (John & Srivastava, 1999). Accounting for overlap, productive personality can be decomposed to trait conscientiousness (attention to detail, persistence), trait openness (adaptability, empathy, open-mindedness), self-confidence, integrity, and emotional stability. The four listed counterproductive traits are conceptually distinct from one another and therefore aggregation was not appropriate.

2.2.6. Values and Motivations

Our analysis also explored the rationales and motivations for individuals who took on terrorism and targeted violence research as a profession. Terrorism research is niche and multi-disciplinary, drawing interest from individuals from a variety of academic and professional backgrounds as noted in section 2.2. Moreover, the serious and potentially disturbing nature of the subject matter studied in these areas is very likely a push factor to prospective scholars who would otherwise have the skills, temperament, and aptitude for high performance. Assessing whether patterns or themes exist in the motivations for working in terrorism and targeted violence research professionally may be useful in future efforts to attract and select prospective candidates for academic work in this area.

Our interview questions and analysis draw on prior research into so-called vocational callings (Berg et al., 2010; Bunderson & Thompson, 2009; Elangovan et al., 2010). An occupation is considered a calling when the motivations for pursuing that occupation are rooted in deeply held beliefs, values, and desires that forgo common external incentives (e.g., compensation, prestige, career advancement). The experience of calling is an individual difference; any occupation can be a calling to a particular person and the experience of calling for one person in an occupation does not necessitate the same experience for another person doing the same job. However, research has found that individuals who view an occupation as a calling often frame their work through a common set of personal values and motivations (Bunderson & Thompson, 2009) which suggests that there may be thematic predictors of one's pull towards professions based on common sets of values and experiences.

Interviewees frequently stated that they believed their personal values were a significant motivator for engaging in terrorism research. Three distinct value themes emerged in these discussions; in order of frequency of reference they are harm avoidance, anti-prejudice, and research integrity. Interviewees were often emphatic in their belief that the work that they do has the potential to meaningfully impact the lives of others and to prevent violence, despite its relatively distal relationship to public policy or counterterrorism decision making. These individuals see terrorism research as a positive contribution to the world and an effort toward the "greater good", which increases the attractiveness of the discipline. In some cases, these values were established by crucible experiences earlier in life including witnessing political violence firsthand or working in social services with victims, but most often interests were academic and driven through experiences in courses, research laboratories, or independent study of politics and history.

Connected to general harm reduction, a consistent theme of prejudice mitigation was also revealed. Interviewees frequently noted that the ideological motives of terrorism and targeted violence, and their associated prejudices, were problems that they felt compelled to help solve. These motives often took two forms: motives to protect and motives to "correct". Protection motives are those generated from a desire to defend a group or groups from targeted violence and social harm. Such motives were often cited when the researcher saw themselves as a member of a particular community; researchers who are members of the LBGTQ community recalled being pulled toward terrorism research after studying the Pulse nightclub shooting or exposure to anti-LBGTQ extremism in their personal lives. This is contrasted with "correction" motives, wherein scholars engage in their work in the hope that it may help current or future extremists see the proverbial error of their ways. As one interviewee stated *"...I think that's probably my driving force...if my research can help at least once person see that their views are hurtful or harmful...I will do it. I will continue putting myself in these kinds of spaces..."* (F3, Graduate Student)

Finally, there was a notable trend to consider ethics both in the purpose of terrorism research and in its process. As a byproduct of how serious these researchers believe the purpose and meaning of their research to be, many noted being acutely attuned to the ethics and integrity of research processes. Interviewees noted fearing poorly executed research results being consumed by stakeholders and converted to policies or procedures that may inadvertently cause harm. The ability to control the production of these outputs personally was a noted motivator, and the quality of outputs viewed as reflective of individual integrity. Additionally, several researchers made a point that research ethics in this

space must be a fundamental value due to the sensitive nature of the research and its subjects. Clumsy, poorly executed, and de-anonymized work has real potential to place the lives and well-being of research subjects, their families, and even the researchers themselves in danger.

3.0 TERRORISM RESEARCH AND PSYCHOSOCIAL TRAUMA

The job analysis reported previously suggests that the structure of terrorism and targeted violence research as a profession contains real risk for psychosocial harm to the researcher as a byproduct of typical work experiences. The following sections of this report explore the risk for an incidence of such trauma in greater detail. Although we did not do clinical or psychometric assessments of these constructs in this phase of research, our qualitative work sought to identify trends or potential indices in response patterns that would suggest the presence of these issues in the workforce.

3.1. Defining the Constructs of Interest

Research in occupational health psychology has established that there are myriad physical and psychosocial hazards that can arise from various types of employment. A full accounting of all potential negative personal work outcomes in a given profession requires a continuous stream of rigorous, theory-driven empirical testing and is beyond the scope of this project. However, given the information derived from the previously reported job analysis we can reasonably suggest that terrorism research places professionals at increased risk for the following four issues. Below we provide construct definitions and risk factors for each trauma type.

3.1.1. *Work Strain*

Work strain results from occupational circumstances where the demands (cognitive, physical, emotional, etc.) of a job are high and occur in combination with a low degree of personal control (Ahola & Hakanen, 2007). Higher degrees of work strain are associated with increased rates of absenteeism, burnout, and both psychological and physiological distress (Ahola & Hakanen, 2007; Darr & Johns, 2008; Dyne et al., 2002).

3.1.2. *Vicarious Trauma*

Drawn from research on trauma workers, vicarious trauma describes the experience of empathetically engaging with the trauma of others in a way that negatively alters your own worldview and sense of self (see Cohen & Collens, 2013). Vicarious trauma is effectively a robust form of social cynicism, distinct from direct experiences with or manifestations of traumatic stress. In professions which require consistent exposure to the trauma incurred by others, such as terrorism research, the risk of vicarious trauma is substantially increased.

3.1.3. *Moral Injury*

Drawn predominantly from the military and clinical psychology literatures, moral injury describes the psychosocial harm that arises from the violation of closely held personal values (Frankfurt & Frazier, 2016; Litz et al., 2009; Nash & Litz, 2013). The prototypical experience of moral injury is drawn from research on soldiers who witness or were party to atrocities on the battlefield; the experience of seeing or taking part in deeply disturbing and morally reprehensible actions can result in profound psychological trauma that is akin to but distinct from post-traumatic stress disorder (Barnes et al., 2019; Jordan et al., 2017). Additional research has demonstrated that moral injury can result from value violations in occupational contexts outside of the military (Feinstein et al., 2018; Hoffman et al., 2018; Papazoglou & Chopko, 2017), suggesting that the potential for serious value violations exists in a broader range of occupational contexts.

3.1.4. Burnout

Burnout is an aggregated cognitive, emotional, and physical response to chronic exposure to excessive workplace stressors, resulting in a state of prolonged and significant multi-system exhaustion (see Toker & Biron, 2012). Individuals experiencing burnout often report some combination of both exhaustion and disengagement (Demerouti et al., 2001), resulting in increased risk of work strain, absenteeism, and depression among other psychosocial outcomes (Ahola & Hakanen, 2007; Gil-Monte, 2008; Toker & Biron, 2012). The potential antecedents of burnout are diverse, as any imbalance in job demands and resources can increase the likelihood of burnout over time (Demerouti et al., 2001). Of particular interest to this research, however, is the association between burnout and emotional labor. Prior research has found that emotional labor, the management of experience and expression of emotions in order to meet the expectations of job (Grandey, 2000), can precede job-related burnout (Brotheridge & Grandey, 2002). Prior work in this area has generally focused on service workers (e.g., retail employees; restaurant servers), and centered on their need to provide “service with a smile” by suppressing true emotions on the job. However, any occupational experience which requires an individual who experiences an emotion (e.g., guilt, shame, anxiety) as a response to their work to suppress that emotion to continue working is by definition requiring emotional labor. Given the heavy emotional and moral toll embedded in the context of terrorism research, it is likely that the risk for emotional labor-derived burnout, as well as burnout from typical job stressors, is high.

3.2. Incidence of Trauma or Traumatic Experience

“One of the main things is when we look at the group, we look at the ideology and looking at the ideology requires you to see quotes specifically from the group members themselves. And it's just like the most ugly stuff you could imagine.

And we do that every day. So, there's no...you have to, like, steel yourself. You have to...

My boss says you can move on from a group if it's bothering me that day or something, but it's every single group. It's all disgusting.” (M4, Research Professional)

There was unanimous consensus across our 35 interviews that terrorism and targeted violence research required at least some degree of exposure to materials that can cause distress and psychological harm. Interviewees across disciplines, focus areas, and academic ranks were consistent in stating that the general nature of the subject matter in question necessitates reading, watching, viewing, or otherwise engaging with content and materials that are non-normative and have the potential to distress. As further evidence of this, several interviewees made a point of remarking that they must be careful when considering work outside of their home or office as they do not want to expose others (i.e., “civilians”) to the material that they themselves know may be objectionable or distressing.

Although there is consensus that traumatic experiences are possible given the nature of the work, thematic differences did emerge. Of specific note are differences in perceptions of exposure based on position in the academic or institutional hierarchy as well as differences in average exposure severity. These are discussed in greater detail below.

3.2.1. Positional Differences in Exposure

“If you're somebody like [name], who's reading through all of these articles, you're engaging with a lot of really horrible stuff. If you're somebody like me who gets the numbers afterwards? You don't.” (M15, Primary Investigator)

The most significant and consistent trend we found when discussing perspectives on work-related trauma was the existence of hierarchical, positional differences in viewpoint. Primary investigators and senior research personnel with project management responsibilities were less likely to report regular exposures to traumatic material than were graduate students, undergraduates, or non-academic research professionals. Interestingly, primary investigators reported awareness of both the discrepancy between themselves and junior researchers and the real possibility that the work of those junior scholars could cause them harm (see the above quotation from M15). Despite this awareness, and occasional statements recognizing the potential need to address issues generated from workplace exposures, in aggregate primary investigators appeared to accept such discrepancies as established status quo for the field.

In contrast, junior researchers across ranks, disciplines, and specialties reported consistent exposure to materials that they considered distressing or potentially harmful. Interviewees reported feeling that the content they were tasked with engaging with made their jobs unpredictable and ambiguous in a way that could be distressing, as it is difficult to prepare for what you may encounter on a day-to-day basis. Such “surprise” exposures can be distressing enough to directly cause disengagement from work and a need to engage in coping strategies in order to prepare for the following day.

“[I am exposed to traumatic material] Everyday. And it doesn't matter, at least from my experience, how long you've been embedded in the community. It can still get you, like, literally out of nowhere. Something that isn't as violent can still really trigger me one day, and I need to like just stop working that day. It can be really unpredictable, which makes it harder.” (F20, Research Professional)

“But just terrorism researchers in general, I think you're engaging with kind of distressing material as a facet of your job, like you don't get away from that probably ever.” (F18, Graduate Student)

These positional differences matter greatly. Interviewees across multiple institutions reported that they knew highly qualified researchers who left their institutions and the discipline entirely in response to unmanaged exposure to traumatic content. Moreover, junior scholars reporting on these peer experiences, or their own consideration of disengagement from this work for such reasons, often noted that they felt their supervisors and primary investigators were setting them up for trauma. Junior scholars reported feeling unprepared for what they may encounter and struggling to explain or raise the issue to primary investigators due to a gap between how more senior scholars thought about the potential risk for trauma. Such an understanding and communication gap not only increases the likelihood that junior researchers will be psychologically harmed by their work, but also that the future research workforce in this space is being depleted by self-selection in a way that could be addressed.

3.2.2. Exposure Severity

Interviewees also noted that the typical severity or intensity of their exposures varied, often along positional and research topic lines. Some research centers reported engaging with terrorism and targeted violence in a more abstract way; evaluating datasets, reading second and third-hand accounts of group behavior, or tracking how an organization uses its money does not place researchers at risk often. It is relatively uncommon, however, to have such research foci comprise the majority of center's program of research. In most cases, based on our interviewing, some non-trivial and consistent engagement with violent, gory, and/or propagandistic content is a regular job-related occurrence. When people do engage with such materials, they report awareness of how it can distress them.

*"Everything I've had to do with terrorism research has been distressing in one way or another."
(F4, Undergraduate)*

*"I've only seen like a small fraction of what other people would probably experience on average, but like the imagery that I've seen is, like, really gory. It's stuff that sticks with you."
(F12, Primary Investigator)*

Many interviewees reported a feeling of being "desensitized" to violence and violent imagery. When claiming desensitization, interviewees would report that exposures to such material no longer bothers them and that they are able to compartmentalize those experiences in a way that mitigates their potential distress. As one interviewee noted, "There's not much I can see at this point that would shock me" (F14, Graduate Student).

"We probably watched 20 videos of suicide bombers, right? It doesn't affect me at all. Like, you know, I didn't, wasn't horrified. Like, the blood didn't matter, right? And, you know, is that just because I'm, because it really doesn't or it's altered my just general way of responding to things?" (M9, Primary Investigator)

"You definitely get desensitized and I definitely feel that way personally, like I can read kind of bad stuff and I'm just like blank, like over your coffee, like blank face, and it doesn't really bother you anymore." (F18, Graduate Student)

Desensitization is a coping strategy rooted in repeated exposures to an aversive stimulus. Prior research has found that desensitizing from certain negative stimuli can be a productive strategy, assisting in the abatement of phobias or issues of anxiety (McNally, 1987). However, clinical researchers warn that the value of desensitization is not absolute. Desensitization to violence, in particular, may be associated with counterproductive behavior changes over time (Di Tella et al., 2019; Mrug et al., 2016). Humans are innately conditioned to abhor and avoid violence as a mechanism for self-preservation. As such, any experience which reduces the implicit aversion to violence and violent imagery may increase the likelihood for unanticipated psychological, physiological, and behavioral reactions in the future. These concepts are further expanded in section 3.3.3. regarding coping strategies.

"Depending on your background, anything can be the thing that is a small little trigger. And over time, those things, they build up. And so, you know, one thing one day, one thing another day, these things they leave little scars. And I, I don't I don't know. Yeah, it's just little things all the time." (F3, Graduate Student)

3.3. Impacts of Traumatic Exposures

When discussing how typical exposures to challenging or distressing material impacts them, interviewee responses fell into three broad categories: psychological impact, behavior changes, and common coping strategies. Each of these is discussed in greater detail below.

3.3.1. Psychological Impact

"It's hard to be optimistic. It's hard to be hopeful." (M4, Professional Researcher)

Despite common claims of desensitization, interviewees raised several psychological impacts from their work that are notable. A common theme was an inability to fully separate their work from their personal lives, particularly after a difficult content exposure. Although several interviewees noted that they structure where and when they do their work in order to minimize spillover effects, the general consensus was that total separation of work and personal lives are not possible given the gravity of the content that is regularly engaged with.

"So it's kind of hard to find an escape from how awful it is and it seeps into your personal life, and like I said, even though I really like what I do with it is difficult at times and it is hard to shut it off." (M4, Professional Researcher)

A consequence of this spillover is a noticeable increase in base-rate paranoia. Interviewees reported feeling increasingly unsafe in public spaces, community events, and even their own neighborhoods and homes. Paranoia is co-occurring with hypervigilance, an increased and disproportionate degree of attention paid to otherwise normal environmental stimuli. Interviewees reported feeling like they could not trust the general public and must consider the potential threats that may be embedded in any and all social situations, regardless of how routine they may be.

"I got a lot more like paranoid, like an anxiety of my own safety. And I eventually actually ended up moving because of that...I don't feel safe in my home." (F4, Undergraduate)

"It's like the distrust of people, like I don't trust anybody... I was in Paris and this girl and her boyfriend were walking past us and they dropped something and it fell underneath my coat that was on the ground. And I like froze... that's what I'm thinking of... what's like the worst case scenario? And they just like, drop like their pen and it's just like you automatically go to the worst things that could happen." (F7, Professional Researcher)

This degree of work-induced anxiety is psychologically unhealthy and, if left unaddressed, has the potential to significantly damage the quality of life of those who suffer from it.

3.3.2. Behavioral Change

In response to increased paranoia and hypervigilance, numerous interviewees noted that they made changes to their behavior to relieve their anxieties. Thematically, behavior changes often centered around self-isolation and removing the possibility of threats from exposure to the public. Large events and high-density soft targets were considered riskier after engaging with terrorism research, despite researchers themselves understanding that the risk of real threat is extremely small.

"I do not take public transportation. That's one thing. I avoid it at absolutely every cost that I can." (F18, Graduate Student)

"I don't go to big group events. [I'm] scared of things like that, for sure. Of like being in the wrong place at the wrong time, even though it's statistically like, very unlikely." (F10, Primary Investigator)

Such adjustments can impose significant barriers to the quality of life of those who practice them. An unwillingness to take public transportation, for example, makes certain metropolitan areas effectively unlivable and increases the effort and strain required to engage in otherwise basic life tasks. The association between these kinds of behavior changes and the psychological toll of terrorism research content should not be taken lightly; even what seem to be trivial behavioral changes reflect the potential for a substantial psychopathology which cascades into various aspects of the individual researcher's life.

3.3.3. Coping Strategies

Interviews further revealed patterns in coping and adaptation strategies that were common across multiple groups and institutions. A need to engage in coping or compensation strategies is additional evidence that the experience of working in terrorism and targeted violence research is psychologically straining and potentially injurious. Indeed, many of the coping strategies noted by interviewees are similar to those seen in the broader literature on work strain and job-related burnout (Heikkilä et al., 2012; Jackson et al., 2016; Sliter et al., 2014).

Broadly speaking, the coping strategies identified can be separated into "productive" and "counterproductive" categories. Productive coping strategies are those that are not explicitly psychologically or physically harmful, and may provide direct personal benefits. Several interviewees reported relying on consistent exercise and outdoor activity as a productive distraction from the content of their work. Less frequent was the use of a counselor or therapist, although those interviewees who did engage in some form of mental healthcare consistently reported its benefits. Counterproductive coping strategies included frequent references to alcohol and recreational drug use. These behaviors are commonly known responses to stressful work and life experiences, and their prevalence in the terrorism research community should be taken seriously by stakeholders.

"Recreational drug use and drinking, and it's not successful, it's not very successful. You know, it becomes a crutch and it's just not great." (M4, Professional Researcher)

One interesting and consistent social coping strategy that interviewees reported was the use of humor, particularly dark or "gallows" humor among the research group.

"...we can then kind of, like, joke around and laugh. It's like dark humor, but sometimes it's just like, what else?" (F2, Professional Researcher)

Interviewees reported a culture of joking and making light of the darkest aspects of their work in an effort to cope and build community. This dynamic cut across institutional hierarchies but was most prevalent among the community of junior scholars within a given group or institution. The use of humor as a coping strategy for stressful work is well understood and is generally thought of as a productive strategy (e.g., Sliter et al., 2014). However, several interviewees noted that their reliance on humor in their workplace became so habitual that it spilled into non-terrorism related aspects of their lives. Interviewees reported feeling awkward around friends and family who were not in their field because they did not "get" their jokes or found it off-putting when the researcher would seem to make light of objective tragedies. As a result, many interviewees reported feeling that they had to engage in self-censorship when around others so as to not create awkward situations or have people outside of their field think poorly of them. Should these experiences become pervasive, increased risk of self-isolation through social withdrawal is possible.

3.4. Risk Factors of Traumatic Exposures

In association with our job analysis efforts, our analyses determined that there are organizational and discipline-related factors that place terrorism researchers at increased risk for trauma and psychosocial harm. These risk factors manifest

from the unavoidable structure of the job itself, as well as institutional and cultural factors which can, with effort, be changed. These are described in greater detail below along with representative quotations from interviewees.

3.4.1. Structural Risk Factors

"You spend all day reading manifestos of people who are killing people, who are spewing all sorts of hate and, and it's, it's not good for your mental health, right? It puts you in a very strange place and, and you oddly get used to it. And it kind of becomes normalized, which is also not really healthy, either." (F5, Graduate Student)

We consider structural risk factors to be inextricable element of conducting terrorism or targeted violence research that may produce traumatic exposures. It is inescapable that research in this area requires engaging with materials that may be violent, ideologically reprehensible, and opposed to social mores and ethics. Interviewees in this study were clearly aware of this risk, and often portrayed a sense of general resignation to the fact that making progress in the scientific and public policy aspects of terrorism research would require engaging with such materials.

Nonetheless, recognition and consistent reminders that there is real personal risk inherent in doing this kind of work is incredibly important for the future of this field and this workforce. Our research suggests that the resignation to these experiences projected by many researchers is not simply a product of the work itself, but of how the work is designed and the choices that are made regarding how people are trained to engage with it (see sections 3.4.2 and 3.4.3 for additional comments). To wit, although every primary investigator operating a lab or research center we interviewed stated unequivocally that they knew there was at least some possibility that their research could cause distress, only one stated that they had made deliberate operational decisions to mitigate that potential.

"I'm in this for a kind of a pursuit of knowledge. I'm not in it to be traumatized, you know...you couldn't pay me enough to sit down and watch beheading videos. You couldn't pay me enough to have members of staff that have to sit down and watch beheading videos every single day, like I wouldn't be able to live with it." (M13, Primary Investigator)

Although such an approach does, by the admission of this interviewee, limit the scope of research questions that can be addressed, it is revealing that productive research in this area can be the result of an explicit attempt to limit the possibility of harmful exposure.

3.4.2. Institutional Risk Factors

We consider institutional risk factors to be any element of institutionalization that contributes to the experience of or absence of support for traumatic outcomes from terrorism research. Institutionalization is a broad term with diverse applications; a group, organization, or any other collective entity is institutionalized when it abides by a collection of norms that make it behave in a manner that is similar to other entities (David et al., 2019; DiMaggio & Powell, 1983). Therefore, institutional risk factors can be assumed to apply across various entities operating in the same institutional space, as they will be more like one another, on balance, than they are different (DiMaggio & Powell, 1983).

Apart from the structurally embedded risks in doing terrorism research, which are difficult but not impossible to avoid, we find that a serious and pervasive issue is the absence of support structures for those researchers who inevitably do have a traumatic experience. This issue is entirely institutional; at the department or research center level this is likely reflective of a broader culture (see section 3.4.3), but interviewees also noted that there were few if any supports provided by their universities.

"Absolutely not...we talked earlier about policies like the IRB, like, they don't care about me, they care about like what happens when the participants relive trauma." (F10, Primary Investigator)

The above quotation reflects a common view of terrorism and targeted violence researchers, that their larger institutions are more concerned with the ethics of participant safety than they are researcher well-being. As a result, IRB reviews do not consider the potential impacts to the scholars themselves from conducting the research that they are proposing. Participant safety is, of course, paramount in any research project and particularly those with the potential to jeopardize personal security. However, an absence of training, tools, or other protective resources for researchers raises questions about how institutional entities like the IRB can protect scholars without interfering with their research. It should be further noted that this appears to be a problem in the United States specifically; interviewees in the United Kingdom and elsewhere reported that their ethics review boards did specifically consider risks to researchers and required mitigation plans to be included in proposals.

"I do wish there was like, you know, maybe more helpful tools for you when you started the job...maybe...mental health assessments before you start the job, like what kind of, is this thing affect you greatly? I didn't really know...my boss might have assumed that it wouldn't affect me as much as possible. I don't know how other people do it." (M4, Professional Researcher)

"No one's really telling you how to handle stuff. When I was on that project, I was viewing violent imagery. I didn't know how to handle that. I was like having fucking breakdowns and...there was nothing. I don't even think the P.I. even thought about the fact that we were viewing violent propaganda." (F11, Graduate Student)

Apart from the absence of supports from the university or larger research apparatus, there are institutional trends across research labs and centers which similarly suggest a lack of support structure. Although primary investigators and their teams regularly reported that the content of their work was open for discussion and that they felt safe speaking out when they felt troubled, formally established support systems were effectively non-existent. Moreover, graduate students, non-PI researchers, and other junior staff consistently noted that they believed their primary investigators were unaware of the gravity of the content with which they regularly engaged and the effect that it had on them. In only two instances did we find any research group that conducted pre-screenings, formal trainings, or had established policies and procedures for what to do if a person felt distressed by their work. One of these groups, recognizing the potential for researchers to have mental health challenges in response to work, employed a clinician to run monthly processing groups. Interviewees across research groups often shared anecdotes about former colleagues who became quickly disillusioned or distressed by the content of their work and left the field entirely, experiences that may have been avoidable with more up-front work to establish norms, expectations, and clarify support structures.

These issues are addressable, and a paradigm for doing so already exists in the model of research groups outside of the United States. However, research on institutional isomorphism suggests that breaking norms of this type is likely to be more challenging than it appears on the surface due to the immense cultural pressures that created the current status quo (Battilana et al., 2009; DiMaggio & Powell, 1983; Oliver, 1992). The issue of culture as a risk factor is further discussed in the next section.

3.4.3. Cultural Risk Factors

A thematic concern overarching the risk factors laid out in sections 3.4.1 and 3.4.2 is that of culture. As a sociological and organizational concept, culture broadly describes the set of norms, beliefs, symbols, and standards which set out the parameters for operating within a particular space. Culture is inherently institutional and isomorphic; entities which

adopt the same cultural elements will mold those elements so that all entities are similar, and the expanse of that network determines how difficult it will be to change that culture in the future (Greenwood & Hinings, 1996; Maguire & Hardy, 2009; Oliver, 1992). Therefore, when an organizational and institutional problem is determined to be cultural, the success of efforts to resolve that problem are in part determined by how strong the culture currently is.

The gap that we consistently noticed in our research was that which exists between the recognition that lasting trauma is possible in terrorism research, the seeming unwillingness of senior stakeholders to directly address the potential for such trauma, and the continued desire of those who are most likely to be traumatized to continue engaging with a risky job. Our assessment at this stage is that this dynamic reflects a strong, cross-disciplinary culture that implicitly values the most dangerous aspects of this work.

"There's a rush to do that kind of dangerous work because then results in high-profile publications, which leads to job opportunities and things like that. But what kind of perverse incentives are we creating?"

And so I worry about that... they're actually doing themselves massive amounts of harm. And we don't restrain it because it leads to really fascinating insights and novel understanding that leads to publications and books and things to that effect. And that's an ethical threshold that we as a field have to wrestle with." (M1, Primary Investigator)

The above sentiment from an interviewed primary investigator was repeated by several senior scholars during our interviews. The incentive structure of the field has created a feedback loop which rewards the riskiest research, but does very little to ensure that researchers are prepared to do the work that they are undertaking. This is a top-down institutional problem to which all levels of the terrorism research apparatus (funders, journals, conferences, labs, PIs, etc.) have some degree of ownership and agency. Moreover, per the principles of institutional isomorphism, the longer that these norms exist and are rewarded the more difficult it will be to adjust them in the future.

The desire for the most novel, dangerous, and cutting-edge research most directly affects junior researchers, who are the most likely to directly interact with primary source materials. Moreover, as junior scholars build their careers, they are further incented to push boundaries and do work that they believe will give them the greatest chance to stand out amongst their peers. These cultural issues are compounded, particularly in this population, by a view of risky and disturbing exposures as prestigious. Interviewees reported competing with one another over who had seen the most disturbing propaganda, who was most current on the latest extreme videos, and how they could compare one another's reactions. This culture is indeed so strong that interviewees stated that they were sometimes compelled to expose themselves to incredibly difficult material that had nothing to do with their own research, just to be able to say to others that they had done so.

"Sometimes it can be like a bravado, if you know what I mean, in the field, like, "Oh, you see this worse video? I saw it. Did you see it?" And it's really unhealthy, and it's not a bragging thing because these are people's lives. You know? It's pretty disturbing." (F13, Graduate Student)

The existence of such social competition further emphasizes the cultural problem in the field regarding its subject matter. Individuals believe that they must expose themselves to potentially traumatic content to be good scholars, and that not doing so would leave them behind professionally and socially. When combined with a general lack of training on how to manage such exposures, and little to no institutional support structures to rely on, the typical terrorism researcher is likely at substantially more risk for psychosocial trauma than they are aware on a day-to-day basis.

4.0 CONCLUSION

"Terrorism isn't a discipline. Terrorism is a problem. (F15, Primary Investigator)"

The above quotation from an interviewee speaks to the challenge inherent in trying to define or operationalize terrorism research, as its multi-disciplinarity makes it difficult to classify as its own distinct field. As such, from a job-analytic perspective terrorism research is much like other academic pursuits in the social sciences with respect to many of the KSAOs that are necessary for success. However, a key differentiating factor is the connection between personal values and motivations for working in this space. Value laden work can be immensely rewarding, and individuals who see their work as a reflection of their values are often more satisfied, more committed, and less likely to engage in counterproductive work behaviors. Developing that sense of purpose in prospective applicants, students, and cross-disciplinary primary investigators will be an important antecedent to continued growth of terrorism research as a scientific topic area.

An additional, important issue is the hierarchical nature of terrorism research within institutions. Many scientific disciplines are organized around hierarchies and ranks, with primary investigators having substantially different expectations and work requirements than post docs and graduate students. However, very few fields require exposure to the kinds of materials that are common in terrorism and targeted violence research. Moreover, the common disconnect between the graphic nature of material commonly experienced by junior scholars versus the sanitized data and materials that primary investigators engage with is likely to be unique to terrorism research and similar research areas. This structure inadvertently exposes a proportion of the research workforce to an outsized risk of personal trauma while also isolating senior decision makers from their most complete understanding of those experiences. This presents and reflects a series of risk factors for psychosocial trauma that should not be discounted.

Although less than 50% of respondents said explicitly that they believed their work in terrorism and targeted violence research had left them open to distress or trauma, the qualitative exploration of how they describe psychological and behavioral responses to their work suggest otherwise. Radical adjustments in social cognition, purposeful changes in behavior to avoid possible but extremely unlikely threats, and routine engagement with both healthy and unhealthy strategies to cope are all indices of psychosocial trauma.

"It's unavoidable because the content itself is traumatizing, right, in the sense that you have to normalize violence and that process is in of itself traumatizing. Like, there's no way to avoid the fact that when you normalize violence as something that is a legitimate field of study. Right?"

Then you have to internalize that process and see violence as a normal set of operations in life. And then when you encounter it and in your personal experiences, your response to it will be different than most people in the world.

And so to me, that's exactly what trauma is. It is a shifting of your viewpoint as a result of an event that changed how you understand reality. And I think that there's no way to avoid that trauma in this field." (M5, Primary Investigator)

It is evident from our research thus far that terrorism and targeted violence research as a field has a self-perpetuating issue with trauma risk. The combined structural, institutional, and cultural risk factors co-create an environment which is extremely limited in its ability to prepare and support individuals for work-related traumas. This should be taken seriously and considered a risk factor for future workforce development. Institutions ranging from individual research groups to the entire research community itself should consider what interventions are accessible to help assuage this

issue in the future. It is clear from our research that this area has lost numerous high-aptitude scholars because of their experience with a traumatic work environment, and further that some non-trivial proportion of the current workforce is dealing with the personal and social fallout of traumatic experiences. Further research is needed to assess the true frequency and intensity of these experiences, as well as to identify reasonable intervention points. This objective will be the empirical focus of Phase 2 of this project, conducted in 2023-2024.

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APPENDIX A: COMBINED JOB ANALYSIS (C-JAM) METHOD

AA.1 Research Design and Ethics

AA.1.1. *Job Analytic Interview Protocol*

To generate a holistic profile of terrorism and targeted violence research as a profession, Phase 1 of PT2R is fundamentally rooted in job analysis. Job analysis is a descriptive interviewing and data synthesis technique pioneered in Industrial/Organizational Psychology, used to generate subject matter expert-informed profiles of occupations. These profiles explain in detail the knowledge, skills, abilities, and other characteristics (KSAO) that are necessary for performing on the job at a high level, as well as individual differences, interests, values, and professional qualifications which are associated with occupational fit (Morgeson & Campion, 2000; Pearlman & Sanchez, 2010). Job analysis is considered an essential technique in human resource management and serves as the scientific basis for the development of selection, assessment, and performance management systems across various occupational contexts.

Job analyses are built on a combination of structured interviewing of subject matter experts (SMEs) and work task observation, depending on the specifics of the occupation being evaluated. Structured interviewing is a qualitative data collection process which relies on the consistent use of carefully designed questions across interview participants. These questions are written to assess specific, job-relevant information and to avoid the unanticipated inclusion of information that is unrelated to job performance but may bias assessments. Structured interviews can be viewed in contrast with unstructured interviews, which allow the interviewer to ask any question of a participant regardless of practical relevance, thus increasing the likelihood that biased or unhelpful information is included in summative assessments. Following the guidelines laid out by prior researchers (e.g., Morgeson et al., 2016; Morgeson & Campion, 2000; Morgeson & Humphrey, 2006), we designed a structured interview protocol to assess the perspective of current terrorism and targeted violence researchers on their typical job experiences, as well as their perspectives on predictors of high-level job performance. A structured interviewing approach is critical to job analysis as the way a particular question is interpreted by different interviewees may be analytically important. The interview format was not so rigid as to exclude the possibility of follow-up questions or requests for the interviewee to expand on an answer, however. Direct observations of work tasks were deemed unnecessary as the work is primarily based on non-physical activities and can be readily described.

Due to the secondary objective of PT2R to assess risk factors and incidence of work-related psychological trauma, a series of questions were also asked about typical experiences with and exposures to distressing or traumatic content as well as the presence of personal values in the day-to-day experiences of work in these fields. Responses to these questions were analyzed and interpreted in context with the more traditional job analytic questions as they are both antecedents and outcomes of typical job characteristics. They can also be viewed independently from those as a discrete set of qualitative data which specifically informs questions regarding secondary trauma, moral injury, and other psychosocial outcomes.

Interviews were conducted both in person during site visits and virtually via video chat. Total interview time surpassed 30 hours, with an average interview duration of 50 minutes. See Appendix B for the full interview protocol.

AA.1.2. *Ethics and Anonymization*

Prior to contacting potential interviewees, the interview protocol and approach for this study were approved by the Institutional Review Board of the University at Albany. This approval covered all personnel involved in conducting participant interviews and handling interview data. All participant interviews were audio recorded, with audio files ported into analytical software under generic coded pseudonyms. Interviewees were compensated with a USD \$10 digital gift card to Amazon.com. All study-related files were stored on local devices under password control, only to be accessed by study personnel.

In the analysis and subsequent reporting of findings all participants are classified by non-identifying demographic attributes. Participants were assigned anonymizing identifiers based on gender and interview number (e.g., “M1”, “F1”). Other relevant demographics are reported as needed based on generic indicators of position (e.g., “PI”, “Graduate Student”), discipline (e.g., “Psychology”, “Criminology”), nation of residence, primary research modality (e.g., “Quantitative”, “Qualitative”), and institution type (e.g., “University”, “Private Sector”).

AA.2. Participant Recruitment and Demographic Data

Participants were recruited via snowball sampling and self-nomination. At the outset of the project six research institutions provided letters of support articulating institutional willingness to participate in the research effort. As such, representatives from these institutions were the first ones contacted to assess their ability to participate as interviewees. These individuals were further encouraged to nominate potential interviewees from their professional networks. Additionally, a preliminary survey was distributed to known terrorism and targeted violence researchers who were encouraged to both take the survey themselves and to share the survey within their networks. A final question on the survey asked if the participant would be willing to be contacted for an interview; if the participant responded affirmatively, they would be taken to a second webpage which would allow them to enter their contact information.

Prospective interviewees were subject to a small number of specific inclusion criteria. To be eligible as an interviewee a person must have been currently working in terrorism or targeted violence research at an academic institution, independent research center, or think tank. Individuals who had previously studied terrorism or targeted violence but were not currently actively engaged in research or research-related activities were not eligible to participate. Additionally, individuals who were engaged in research that is conceptually adjacent to terrorism and targeted violence (e.g., hate crime) were not eligible to participate. Participation was not limited by academic degree, rank, specialty, or any other demographic or professional criteria aside from those listed above.

Our final sample included 35 interviewees: 15 men and 20 women. Interviewees represented 8 academic disciplines with the largest proportion (34%) drawn from Criminology, followed by Political Science (23%), Emergency Preparedness (17%), Security Studies (9%), International Relations (6%), Business (6%), Sociology (3%), and Psychology (3%). At the time of interview 46% of interviewees held doctoral degrees, 43% held master’s degrees, and 11% held bachelor’s degrees; it should be noted that individuals pursuing a degree but not yet completing one were classified based on their highest level of education to date.

Most interviewees were based in the United States (80%) and housed in a university department (57%). We distinguish between departments and dedicated research centers (40%), which may be housed in universities but separate from or spanning across departments. Only one (3%) interviewee was a professional researcher based outside of an academic institution. Positional rank varied considerably in the sample, with primary investigators comprising the largest group (46%), followed by graduate students (31%), non-student research professionals (17%), undergraduates (3%), and research center staff (3%). Scholars identified most often as primarily quantitative researchers (63%), followed by qualitative (26%), and mixed methods (9%).

AA.3. Analytical Approach

Audio files were transcribed and checked for transcription accuracy by members of the research team. Completed transcripts were then uploaded for coding and analysis in the NVivo 14 platform, a leading analytical tool in qualitative research. Cases were coded inductively, in accordance with best practices for grounded theory qualitative research (Gioia et al., 2013). Transcripts were initially reviewed for broad, thematic references to constructs of interest, with successive coding added to note specific details, patterns, and emerging themes. This iterative process allows for self-correction and consistency in coding over time. All comparative queries, word count and textual analyses, and sentiment analyses were conducted in NVivo based on the final coding decisions in the dataset.

AA.4. Limitations

As with any research project, Phase 1 is not without several limitations which should be noted. Foremost of these is the scope of the sample. Although the relative inclusiveness of our selection criteria allowed for interviewees across ranks, disciplines, and focal areas, the resulting sample of 35 interviewees is somewhat limited. Due to the convenience sampling method that were employed there are potential issues of selection biases, and we acknowledge that there are scholars who would be good candidates for inclusion in this study who were either not contacted or chose to self-select out of the interview process. Additionally, it should be noted that our interviews focused only on individuals based in the United States or United Kingdom and does not account for the perspectives or experiences of individuals engaged in this research in other areas of the world.

In addition, with respect to sample, it should be noted that this project exclusively focused on the academic and scientific aspects of terrorism work. This was an intentional feature of this project; our overarching objective was to develop a point of view regarding the summative experience of people working in this area specifically. Thus, a limitation of this report is that its conclusions can only be generalized to individuals working in the same or highly similar contexts. Further research will be needed to extrapolate any findings or conclusions of this report to the broader counterterrorism workforce.

It is also important to acknowledge that, due to the sensitive nature of the materials that the interviewees engage with as well as the form of our questions, it is possible that there is some self-censorship in responses. This is particularly likely in responses to questions about personal values, experiences with traumatic content, and coping mechanisms for trauma. These are sensitive, personal topics which can be difficult to speak about or to reflect on. As a matter of research ethics, we did not insist that participants respond or elaborate on any question, and allowed for interviewees to speak on these topics only to the extent they were willing. We did not note any instances where our interview appeared to cause distress, no interviewees withdrew from the interview, and many interviewees noted that they felt it was important to speak about the most sensitive and troubling aspects of their jobs. Nonetheless, it is possible that some meaningful experiences or dynamics are obscured from our final dataset due to the nature of the data collection effort.

APPENDIX B: JOB ANALYSIS INTERVIEW PROTOCOL

Structured Interview Questions / Protocol

The goal of this project is to identify the knowledge, skills, abilities, and other personal characteristics that are associated with being a successful terrorism researcher. We will use the information collected from this interview today to identify the characteristics of terrorism researchers that are associated with success on the job, as well as typical job-related experiences.

Opening Questions

1. It would help us to know a bit about your motivations and background in getting involved in terrorism research. How did you get involved in this area and what is your educational and professional background?
2. Could you describe your typical workday?
3. Could you describe the physical spaces that you typically do your work in?
4. What do you consider to be the major tasks of your job?

Knowledge

5. What kind of knowledge do you need for your position?
6. What kind of training did you receive learn/acquire this knowledge?
7. What policies, procedures, guidelines, and/or rules do you need to follow?
8. In your opinion, what is the minimum degree, amount of education, and/or experience required to perform your position?

Skills

9. What skills does a successful terrorism researcher need to learn to do their job well?
10. What area(s) of prior experience are required for a new terrorism researcher?
11. What area(s) of prior experience are helpful, but not necessarily required, for a new terrorism researcher?

Abilities

12. What specific mental abilities do you think are critical for successfully performing as a terrorism researcher? (e.g., Memorization, Decision Making)
13. What specific interpersonal abilities do you think are critical for successfully performing as a terrorism researcher? (e.g., Communication, Oral Comprehension)

Personality

14. Think of the best terrorism researcher you know. What personality characteristics did they have that made them successful?
15. Now think of the worst terrorism researcher you know. What personality characteristics did they have that made them unsuccessful?
16. What are the essential personality traits a person should have in your position?

Values and Work

17. To what extent do your personal values motivate you to engage in terrorism research?
18. What specific values (if any) do you see reflected in the work you do day to day?

Engagement with Traumatic Content

19. In your experience, how often are terrorism researchers required to engage with traumatic and distressing content as part of their job?
20. What are traumatic exposures that are typical in terrorism research?
21. What policies, procedures, guidelines, or other structures exist to support you when you encounter traumatic content?
22. To what extent do you believe that the content you encounter doing terrorism research has impacted other, non-work areas of your life?
23. Is there anything you do, or avoid doing, as an outcome of work in terrorism research?
24. What approaches do you take to coping with traumatic experiences, and how successful are they?

Conclusions

25. Is there any additional information that we have not covered that you wish to tell us about, or otherwise feel is important for our analysis of terrorism researchers?