

TRAP-18 Indicators Validated Through the Forensic Linguistic Analysis of Targeted Violence Manifestos

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This study is a qualitative and quantitative analysis of written and spoken manifestos authored by lone offenders that planned to or committed a targeted attack ($n = 30$). The acts of violence were primarily motivated by an ideology or a personal grievance, and occurred between 1974–2021. The main objective of this retrospective study was to examine if a behavior-based threat assessment instrument, the Terrorist Radicalization Assessment Protocol (TRAP-18), could be applied to a thin slice of data using *only* language evidence compiled by the perpetrator before the event occurred. Findings indicate that 17 out of 18 TRAP-18 indicators (94%) were able to be coded in the manifestos. Proximal warning behaviors ranged from 2 to 7, with an average of 4.5. The average number of distal characteristics was 3.8 across the sample. The most frequent proximal warning behaviors were *leakage*, *identification*, *fixation*, and *last resort*. The most frequent distal characteristics were *changes in thinking and emotion*, *framed by an ideology*, and *personal grievance and moral outrage*. Further analyses of the manifestos comparing written versus spoken communications, ideologically based versus grievance-fueled attacks, and seven categories of primary motivations, supported the generalizability of the TRAP-18 when applied to only language data. A definition for targeted violence manifestos is proposed and examined within a genre framework. Application to threat assessment and management is discussed.



Public Significance Statement

This study analyzed the language of targeted violence manifestos to see if TRAP-18 indicators could be identified in a thin slice of data. Ninety-four percent of the indicators were present, including both proximal warning behaviors, which averaged 4.5 per manifesto, and distal characteristics. A definition for targeted violence manifestos is proposed and examined within a genre framework. Application to threat assessment and management is discussed.

Keywords: forensic linguistics, threat assessment, targeted violence, lone actor terrorism, radicalization

Archaeological discoveries have suggested that writing was invented more than 5,000 years ago once human beings began developing the

need for recording business transactions when exchanging goods or selling land (Crystal, 2006). As criminal activity has existed since the

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manifestos within a genre framework. J. Reid Meloy receives income from the training and distribution of the TRAP-18 through license to Multi-Health Systems (www.mhs.com).

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beginning of time, “forbidden genres” of language developed and have functioned widely across cultures as illicit because of traditional and ancient norms and values (Bojsen-Møller, 2020)—for instance, fabricated receipts of goods that were never traded. With the ever-changing nature of language, genres are consistently evolving because individuals adapt and modify social processes to adjust to changing circumstances (Gibbons, 2003). Broadly speaking, *genres* are text types within the framework of society (Olsson & Luchjenbroers, 2014) that are constructed over a period of time and develop from a particular set of communicative requirements (Olsson, 2008). Researchers have analyzed the theory of genre as a social action performed in recurrent situations and traits (Miller, 1984), and continue to examine the blend of classic characteristics in existing categories and new features in unfolding genres (Miller et al., 2018). Consequently, different discourse communities (Swales, 2016) and communities of practice (Wenger et al., 2002) can develop and define practical and purposeful genres that serve different functions, often ensuring that these genres are respected by their members (Kramsch, 2003).

We think that some communications in a criminal context, for instance ransom demands, bomb threats, mass murder threats, and hate letters, may be part of a wider category, the *illicit genre*: communications that “generally disrupt and upset society and commonly affect their targets negatively” (Bojsen-Møller et al., 2020, p. 3). In contrast to more conventional classifications, such as police reports, research articles, or historical fiction novels, illicit genres do not appear to correspond to an official institution and are generally not socially accepted (Bojsen-Møller et al., 2020). We propose that the term *targeted violence manifesto* is a new illicit subgenre because it serves a unique function and communicative need in society.

Targeted Violence

Targeted violence refers to an intended and purposeful attack where the perpetrator selects a specific target, such as a location, group or individual, prior to carrying out a destructive act. The offender plans and prepares an attack while advancing on a pathway to violence (Calhoun & Weston, 2003) from grievances and violent ideation toward an action-oriented stage and escalation. Personal grievances are “often based

on a perception of having been wronged or treated unfairly or inappropriately [by a specific person or category of people, which] may result in a desire or even a mission to right the wrong and reach deserved justice/status” (Shrestha et al., 2020, p. 2). Targeted violence may lack discernible motivations for political, religious, or social changes, now referred to as lone actor grievance-fueled violence (Barry-Walsh et al., 2020; Clemmow et al., 2020; Pathé et al., 2017). On the other hand, it may be primarily an act of terrorism—ideologically motivated targeted violence—defined as “the use or threat of action which is designed to influence the government or to intimidate the public or a section of the public, and/or the use or threat is made for the purpose of advancing a political, religious, [social] or ideological cause” (Gill et al., 2013, p. 2). The elementary difference between both groups is their motivation.

Threat Assessment

Multidisciplinary advances over the past three decades have established threat assessment and management of targeted violence as a new area of scientific research (Meloy & Hoffmann, 2021). Although acts of targeted violence are extremely difficult to predict, largely due to their low base rates, it has become apparent that subjects who embark on a pathway to violence consistently exhibit warning behaviors that alert threat assessors to engage in management of the emerging threat (Federal Bureau of Investigation, 2017). These patterns of warning behaviors have been shown to both correlate with, and in some cases predict, acts of targeted violence, and have been widely adopted as a means by which a person of concern’s behavior can be analyzed prior to an attack (Meloy, Hoffmann, Bibeau, & Guldman, 2021). A principle structured professional judgment instrument for assessing the risk of a lone actor terrorist attack is the Terrorist Radicalization Assessment Protocol (TRAP-18; Meloy, 2017), which incorporates these proximal warning behaviors. The TRAP-18 has demonstrable reliability, and content, criterion, discriminant, and predictive validity in numerous studies (Allwinn et al., 2019; Böckler et al., 2020; Challacombe & Lucas, 2019; Goodwill & Meloy, 2019; Meloy et al., 2019; Meloy & Gill, 2016; Meloy, Goodwill, et al., 2021). Although there are a few terrorist risk assessment instruments, the TRAP-18 is the only

one with established reliability and validity in the open source scientific literature.

This study is a qualitative and quantitative analysis of written and spoken manifestos authored by lone offenders who planned to or committed a targeted attack ($n = 30$) that was either ideologically motivated or personally driven by a primary grievance. The main objective of this retrospective study is to examine if a behavior-based threat assessment instrument, such as the TRAP-18, can be applied to a thin slice of data using only *language* evidence compiled by the perpetrator. In this unique approach, the notion of applying forensic linguistic and threat assessment techniques to the content of a manifesto is tested to identify if it can further validate the proximal warning behaviors and distal characteristics of the TRAP-18.

Method

Subjects

The source materials for all subjects, including their manifestos, were identified by conducting systematic research in the Violence Project Mass Shooter Database (Peterson & Densley, 2020), a comprehensive repository of information on U.S. mass shootings, and by studying academic literature and open-source data. For this study, subjects were selected based upon the following criteria:

1. The attack was planned with a specific target in mind and designed to be witnessed by the public.
2. The offender acted alone with no affiliation to a terrorism group.
3. The incident was motivated primarily by personal grievances and/or violence-justifying ideologies, excluding gang, organized, domestic, or state-sponsored crime incidents.

The number of casualties was not taken into consideration during the selection process, as some attacks did not result in any target injuries or deaths (e.g., Willem van Spronsen). We also avoid using the term *mass murderer*, as it involves multiple victims—usually three or four—killed at one or more geographically close locations over a relatively short period of time (Hempel et al., 1999; Horgan et al., 2016).

In order to classify the motivations for each attack, the categories of the recently published Office of the Director of National Intelligence (2021) report on domestic violent extremism were refined and expanded. Though some lone offenders cypasted from different ideologies (also known as “salad bar” or “cafeteria” ideologies), all manifestos included references to the perpetrators’ self-identified grievances or triggers, which were utilized to determine the primary motivations for their acts of violence, as well as their types of attacks.

Although every terrorism-related incident in this study was motivated by violence-justifying ideologies (Webber et al., 2020) that advocate the extreme belief system of a certain movement, the perpetrators were not under external command and control of an organized terrorist group. Without being burdened by group decision-making and intergroup dynamics (Simon, 2019), these types of offenders act alone and can be more dangerous, unpredictable, and creative in formulating their plans and training for their operations. However, this does not suggest that they were not influenced by global terrorist movements, and did not aspire to be recognized as a *bona fide* “soldier” for their chosen cause (Meloy et al., 2019).

The final sample consisted of 30 attacks that were carried out by a single protagonist in one or multiple incidents across North America, Europe, or Oceania between 1974 and 2021. The events occurred in the United States ($n = 25$), Canada ($n = 1$), Germany ($n = 2$), Finland ($n = 1$), and New Zealand ($n = 1$). The attacks were primarily fueled by the following motivations: race/ethnicity ($n = 8$), anti-government and anti-authority ($n = 3$), involuntarily celibate ($n = 3$), jihadism ($n = 4$), idiosyncratic¹ ($n = 3$), misanthropy ($n = 4$), and other² ($n = 5$). Their methods included shootings, bombings, stabbings, vehicle rammings, an aircraft crash, and a hostage taking. Twenty-nine out of 30 lone offenders executed their attacks (97%), while one plot (Jared Cano) was interdicted by law enforcement before the perpetrator could carry out his violent plans. Table 1 lists the perpetrators; date, location, and method of attack; as well as type of attack and primary motivation.

Prior to all attacks in this study, the subjects communicated their intent to do harm to a third

¹ Mixture of different ideologies.

² Mentally ill or purely grievance-driven (revenge, frustration, hate).

Table 1
Perpetrators, Attacks, Primary Motivations (n = 30)

Name	Date	Location	Method	Type of attack and primary motivation
Muharem Kurbegovic (<i>Alphabet Bomber</i>)	08/06/1974	Airport; USA, Los Angeles (CA)	Bombing	Ideologically motivated: idiosyncratic ^a
Gang Lu (<i>University of Iowa Shooting</i>)	11/01/1991	University; USA, Iowa City (IA)	Shooting	Grievance-based: other (revenge, hate)
Luke Woodham (<i>Pearl High School Shooting</i>)	10/01/1997	High school; USA, Pearl (MS)	Shooting, stabbing	Grievance-based: misanthropy and other (revenge, frustration, hate)
Lucas Helder (<i>Midwest Pipe Bomber</i>)	05/03–06/2002	Mailboxes; USA, CO, IA, IL, NE, TX	Bombing	Ideologically motivated: idiosyncratic ^b
Mohammed Reza Taheri-azar (<i>UNC SUV attack</i>)	03/03/2006	University; USA, Chapel Hill (NC)	Vehicle ramming	Ideologically motivated: jihadism
Sebastian Bosse (<i>Emsdetten School Shooting</i>)	11/20/2006	High school; Germany, Emsdetten (NRW)	Shooting, bombing	Grievance-based: misanthropy and other (revenge, frustration, hate)
Pekka-Eric Auvinen (<i>Jokela School Shooting</i>)	11/07/2007	High school; Finland, Jokela (Tuusula)	Shooting	Grievance-based: misanthropy and other (revenge, frustration, hate)
Jim David Adkisson (<i>Knoxville Unitarian Universalist Church Shooting</i>)	07/27/2008	Place of worship; USA, Knoxville (TN)	Shooting	Ideologically motivated: idiosyncratic ^c
Jiverly Wong (<i>Binghamton Shooting</i>)	04/03/2009	Immigration center; USA, Binghamton (NY)	Shooting	Grievance-based: mentally ill
George Sodini (<i>Collier Township Shooting</i>)	08/04/2009	Fitness center; USA, Collier Township (PA)	Shooting	Ideologically motivated: involuntary celibates
Christopher Monfort (<i>Murder of Timothy Brenton</i>)	10/31/2009	Patrol car; USA, Seattle (WA)	Shooting	Ideologically motivated: anti-authority (LE ^d)
Joseph Stack (<i>Austin Suicide Attack</i>)	02/18/2010	Internal Revenue Service Office; USA, Austin (TX)	Aircraft crash	Ideologically motivated: anti-government
James Lee (<i>Discovery Channel Hostage Taking</i>)	09/01/2010	TV channel office; USA, Silver Spring (MD)	Hostage taking with weapons and explosives	Ideologically motivated: misanthropy and environmentalism
Jared Cano (<i>Freedom High School Bombing and Shooting</i>) ^e	08/16/2011	High school; USA, Tampa (FL)	Shooting, bombing	Grievance-based: other (hate, frustration)

TARGETED VIOLENCE MANIFESTOS

Table 1 (continued)

Name	Date	Location	Method	Type of attack and primary motivation
Elliot Rodger (<i>Isla Vista Killings</i>)	05/23/2014	University; USA, Santa Barbara (CA)	Shooting, stabbing, vehicle ramming	Ideologically motivated: involuntary celibates
Michael Zehaf-Bibeau (<i>Shootings at Parliament Hill, Ottawa</i>)	10/22/2014	Government building; Canada, Ottawa (ON)	Shooting	Ideologically motivated: jihadism
Dyllann Roof (<i>Charleston Church Shooting</i>)	06/17/2015	Place of worship; USA, Charleston (SC)	Shooting	Ideologically motivated: race/ethnicity
Christopher Sean Harper Mercer (<i>Umpqua Community College Shooting</i>)	10/01/2015	College; USA, Roseburg (OR)	Shooting	Ideologically motivated: involuntary celibates
Faisal Mohammad (<i>UCM Stabbing Attack</i>)	11/04/2015	University; USA, Merced (CA)	Stabbing	Ideologically motivated: jihadism
Kori Ali Muhammad (<i>Fresno Shooting Spree</i>)	04/13–18/2017	Motel and street; USA, Fresno (CA)	Shooting	Ideologically motivated: race/ethnicity
William Aitchison (<i>Aztec High School Shooting</i>)	12/07/2017	High school; USA, Aztec (NM)	Shooting	Grievance-based: other (frustration)
Nikolas Cruz (<i>Stoneman Douglas High School Shooting</i>)	02/14/2018	High school; USA, Parkland (FL)	Shooting	Grievance-based: misanthropy and other (revenge, frustration, hate)
Robert Bowers (<i>Pittsburgh Synagogue Shooting</i>)	10/27/2018	Place of worship; USA, Pittsburgh (PA)	Shooting	Ideologically motivated: race/ethnicity
Brenton Tarrant (<i>Christchurch Mosque Shootings</i>)	03/15/2019	Places of worship; New Zealand, Christchurch (CAN)	Shooting	Ideologically motivated: race/ethnicity
John Earnest (<i>Poway Synagogue Shooting</i>)	04/27/2019	Place of worship; USA, Poway (CA)	Shooting	Ideologically motivated: race/ethnicity
Willem van Spronsen (<i>Tacoma ICE Attack</i>)	07/13/2019	Immigration and Customs Enforcement detention center; USA, Tacoma (WA)	Shooting, bombing	Ideologically motivated: anti-government and anti-authority
Patrick Crusius (<i>El Paso Walmart Shooting</i>)	08/03/2019	Retail store; USA, El Paso (TX)	Shooting	Ideologically motivated: race/ethnicity
Stephan Balliet (<i>Halle Synagogue Shooting</i>)	10/09/2019	Outside place of worship and food establishment; Germany, Halle (ST)	Shooting, bombing	Ideologically motivated: race/ethnicity
Mohammed Saeed Alshamrani (<i>Naval Air Station Pensacola Shooting</i>)	12/06/2019	Military base; USA, Pensacola (FL)	Shooting	Ideologically motivated: jihadism
Noah Green (<i>United States Capitol Car Attack</i>)	04/02/2021	Government building; USA, Washington (DC)	Vehicle ramming	Ideologically motivated: race/ethnicity and anti-government

^a Anti-government, anti-communism, anti-nationalism, anti-religion, anti-racism. ^b Anti-government, anti-capitalism, environmentalism. ^c Anti-democrats, anti-liberals, anti-left-wing, anti-media, anti-black, anti-LGBTQ, anti-environmentalists. ^d Law enforcement. ^e Threat was successfully mitigated.

party, which is also referred to as *leakage*, one of the proximal warning behaviors in the TRAP-18. This included uploading the targeted violence manifesto to the internet (e.g., personal website—Sebastian Bosse, George Sodini, Joseph Stack), deliberately spreading it on social media or image boards (e.g., Facebook or 8chan—Brenton Tarrant, Stephan Balliet, Noah Green), or sending it directly to mainstream media outlets (e.g., news organizations—Muharem Kurbegovic, Lucas Helder, Jiverly Wong) prior to the act of violence.

Manifestos

The final dataset of targeted violence manifestos included written ($n = 24$) and spoken ($n = 6$) communications; the shortest one consisted of 26 words (Robert Bowers) and the longest one contained over 17,000 words (Brenton Tarrant). Manifestos were selected based upon the following criteria:

1. Text types could include online postings (e.g., on social media platforms, websites, forums), essays, declarations, statements, flyers, checklists and action plans, or audio/video/tape recordings.
2. The message was compiled before the perpetrator conducted the attack, and was composed days/weeks/months leading up to the incident.
3. The communication was directed toward the general public, not personal addressees, and there was no direct relationship between the author and the audience.
4. The content justified an act of violence against others by stating at least one of the following parameters:
 - A. Self-identified grievances, triggers, and/or motivations for the attack;
 - B. Beliefs and ideologies to promote and/or implement a desired political, religious, or social change;
 - C. Violent intentions and/or strategies for the attack.
5. The writing or recording was composed in the English language and originated from a single author—not dual authorship, plagiarism, or imitation.

6. The language of the manifesto was cohesive and coherent.

Therefore, private writings, such as journal or diary entries, as well as suicide notes, short stories, poems, interview transcripts, personal correspondences (e.g., emails and letters), and image files (e.g., pictures and memes), were not included in this study. This led to the exclusion of various subjects, for instance James Holmes (diary entries), Christopher Dorner (posted manifesto after first murder had occurred), and Taimour al-Abdaly (manifesto compiled in Swedish). Manifestos judged to be written or expressed by a subject who was severely mentally ill were also excluded, due to the lack of cohesion and coherence in the writings.

The term *manifesto* is frequently used in diverse environments, including law enforcement, academia, and the media; however, there seems to be no clear description of the word in a forensic setting. The dictionary defines a *manifesto* as a “public declaration of motives and intentions by a government or by a person or group regarded as having some public importance” (Collins Dictionary, n.d.).

The following definition of targeted violence manifesto was formulated:

A written or spoken communication intended to justify an act of violence against a specific target by articulating self-identified grievances, homicidal intentions, and/or extreme ideologies for committing an attack. Generally composed by a single author before the incident occurs, it sometimes expresses beliefs and ideas to violently promote political, religious, or social changes.

Targeted violence manifestos are heterogeneous and can display significant textual variation in regards to *mode* (written or spoken), *field* (essay, declaration, statement, flyer, action plan, or online posting), *form* (one or more documents/files with varying lengths), and *register* (formal or informal). Furthermore, their composers can exhibit a wide range of inter-author differences³, as they tend to originate from diverse backgrounds and can be motivated by various ideologies or grievances (e.g., white supremacy, jihadism, or misanthropy). Despite these distinct variations, targeted violence manifestos appear to convey similar communicative functions. Language itself has a wide range of

³ Social differences between two authors, for example, age, gender, geographical area, social background, education, occupation.

functions, “each of which manifests itself in an individual set of principles and norms of practice, and demands the application of individual standards of judgement” (Crystal, 2006, p. 462).

It is proposed that targeted violence manifestos perform at least one of the following four functions⁴:

1. Communicating an idea and message: conveying thought processes and offering explanations for the attack, often spreading extreme belief systems and/or violence-justifying ideologies;
2. Controlling and influencing reality: manipulating the future by convincing the reader to be remembered in a specific manner, gaining fame and recognition, attaining infamy;
3. Expressing identity and individuality: maintaining or displaying a place in society (Trask & Mayblin, 2009), signaling belonging to a specific social group (such as national, racial, or religious), transmitting information about a targeted or opposing group (Berger, 2018);
4. Exchanging facts and opinions: persuading like-minded and/or opposing groups to commit similar attacks by using the manifesto as reference material, educating others by sharing tactical advice, uniting followers of contrasting ideologies for future attacks.

These functions may subsequently produce varying effects on the intended and actual audiences, with the receiver conceivably not always being the one intended by the author (Bojsen-Møller et al., 2020), such as victims, the media or supporters. Some targeted violence manifestos are spread online before an act of violence occurs, thus creating an unpredictable audience that might generate different reactions. The content of such communications may be despised as much as the actions and behaviors of the perpetrator who commits the attack, yet certain text elements are essential for an inquiry—contributing to the reason for the attack—and therefore, can be beneficial to law enforcement and other investigating entities.

An important sign of an evolving genre is “when a type of discourse or communicative action acquires a common name within a given context or community” (Miller & Shepherd, 2004, p. 1). This is prominent in various targeted

violence manifestos in this sample: their authors often label their documents as “manifestos” (Christopher Sean Harper-Mercer; Pekka-Eric Auvinen), reference other manifestos (Brenton Tarrant > Dylann Roof, Patrick Crusius > Brenton Tarrant) or copy text elements from notorious same-genre authors who committed similar attacks (e.g., John Earnest > Brenton Tarrant). This appears to be contrary to research conducted on direct and indirect threats, which discovered that some authors disguise their violent messages through indirect wording, anonymity or renaming (Bojsen-Møller et al., 2020), thus likely distancing themselves from their content. Authors of violent manifestos often take ownership of their communicative act and pride in their work. Similarly to a Broadway show, which oftentimes includes one popular song that the audience remembers, it appears that the lone offender compiles a melody of feelings and motivations for the attack with a specific target and audience in mind. This concept is called audience design (Bell, 1984) and is distinct in the case of Stephan Balliet, who authored his manifesto in English, not his first language German—presumably to have maximal exposure to the international right-wing extremists’ community.

Measurement Utilizing the TRAP-18

The Terrorist Radicalization Assessment Protocol, or the TRAP-18, is a structured professional judgment instrument for operational threat and risk assessment of targeted violence and terrorism subjects (Meloy, 2017). The tool consists of two sets of variables: eight proximal warning behaviors and ten distal characteristics Table 2. Complete definitions and further explanations of the indicators can be found in Meloy (2017) and Meloy and Gill (2016).

The first author of this paper completed the 6-hr TRAP-18 online training to become proficient in the use of the instrument, which was developed by the second author and first published in Meloy et al. (2015). The theoretical and clinical foundations for the TRAP-18 are found in Meloy et al. (2012) and Meloy & Yakeley (2014). The proximal warning behaviors and distal characteristics of the TRAP-18 were manually coded as either *absent* (0) or *present* (1) in each manifesto. If a

⁴ The following general notions were taken from Crystal (2006, pp. 462–467) and tailored to the functions of targeted violence manifestos.

subject displayed more than one behavior within any given TRAP-18 indicator—for example, *pathway*, which includes research, planning, and preparation of an attack, as well as implementing tactics and strategies—it was only counted as one instance. Ambiguity was addressed by consulting the second author until consensus was reached.

The warning behavior *fixation* was coded as *present* if continuous thoughts about a person or cause, and evidence that this occurred over time and involved the same topic, was identified in a manifesto, even if a deterioration of the social or

occupational life of the author was not visible. The characteristic *personal grievance and moral outrage* was coded as *present* if a perpetrator expressed thoughts on personal grievance or moral outrage. In some cases, the author of a manifesto highlighted both concepts. Regarding *framed by an ideology*, we view misanthropy—hatred, dislike, or contempt for humankind—as a persuasive belief system in some, and argue that an ideology can develop out of it (see e.g., the beliefs of Elliot Rodger; White, 2017). *Failure to affiliate* was coded as *present* if the perpetrator experienced being rejected by an extremist group or humanity in general.

Table 2

Definitions of TRAP-18 Indicators Are Cited From Goodwill and Meloy (2019). All Definitions Are Displayed in Abbreviated Forms and Should Not Be Used Without Proper Training and Use of the TRAP-18 Manual

Proximal warning behaviors
<ol style="list-style-type: none"> 1. <i>Pathway</i> warning behavior is research, planning, preparation, or implementation of an attack 2. <i>Fixation</i>^a warning behavior indicates an increasingly pathological preoccupation with a person or a cause, accompanied by a deterioration in social and occupational life 3. <i>Identification</i> warning behavior indicates a psychological desire to be a pseudo-commando or have a warrior mentality, closely associate with weapons or other military or law enforcement paraphernalia, identify with previous attackers or assassins, or identify oneself as an agent to advance a particular cause or belief system 4. <i>Novel Aggression</i> warning behavior is an act of violence that appears unrelated to any targeted violence pathway and is committed for the first time 5. <i>Energy Burst</i> warning behavior is an increase in the frequency or variety of any noted activities related to the target, even if the activities themselves appear innocuous, usually in the hours, days or weeks before the attack 6. <i>Leakage</i> warning behavior is the communication to a third party of an intent to do harm to a target through an attack 7. <i>Last Resort</i> warning behavior is evidence of a “violent action imperative” and “time imperative;” it is often a signal of desperation or distress 8. <i>Directly Communicated Threat</i> warning behavior is the communication of a direct threat to the target or law enforcement beforehand
Distal characteristics
<ol style="list-style-type: none"> 1. <i>Personal Grievance and Moral Outrage</i> joins both personal life experience and particular historical, religious, or political events. The personal grievance is often defined by a major loss in love or work, feelings of anger and humiliation, and the blaming of others. Moral outrage is typically a vicarious identification with a group which has suffered 2. <i>Framed by an Ideology</i> is the presence of a belief system which justifies the terrorist’s intent to act 3. <i>Failure to Affiliate with an Extremist or Other Group</i> is defined as rejection of or by an actual extremist or other group 4. <i>Dependence on the Virtual Community</i> is evidence of the individual’s active communication with or learning from others through social media or the internet concerning terrorist activities or beliefs 5. <i>Thwarting of Occupational Goals</i> is a major setback or failure in a planned occupational life course 6. <i>Changes in Thinking and Emotion</i> is indicated when thoughts and their expression become more strident, simplistic, and absolute. Argument ceases, and preaching begins. Persuasion yields to imposition of one’s beliefs on others. There is no critical analysis of theory or opinion, and the mantra, “don’t think, just believe,” is adopted. Emotions typically move from anger and argument, to contempt and disdain for others’ beliefs, to disgust for the outgroup and a willingness to homicidally aggress against them 7. <i>Failure of Sexual-Intimate Pair Bonding</i> is coded if the subject has historically failed to form a lasting sexually intimate relationship 8. <i>Mental Disorder</i> is coded if there was evidence of a major mental disorder by history or at present 9. <i>Greater Creativity and Innovation</i> is defined as an act of planned terrorism which is innovative or likely to be imitated by others 10. <i>History of Criminal Violence</i> is coded if there is evidence of instrumental criminal violence by history

Note. TRAP-18 = Terrorist Radicalization Assessment Protocol.

^a A fixation warning behavior appears to have one of three cognitive-affective drivers: delusion, obsession, or extreme overvalued belief (Rahman et al., 2019).

Forensic Linguistic Approach

The noun *threat* has two distinctive meanings in the English language (Meloy, Hoffmann, Deisinger, & Hart, 2021):

1. Perceived possibility of harm (i.e., potential danger, hazard, risk).
2. Statement conveying an intention to cause harm (i.e., a menacing utterance).

Traditional threat assessment and management essentially rely on the first meaning, with many types of threats (Warren et al., 2021) being examined from a psychological or investigative perspective by mental health, law enforcement, national, corporate, or private security professionals. Forensic linguistics, the scientific analysis of language in a criminal, legal, or judicial context, primarily focuses on the second meaning. It can be applied to written and spoken communications to assess warning behaviors and intended actions that could indicate a risk for violence or harm. Recent studies with a focus on textual evidence authored by terrorism and targeted violence offenders utilized automated threat assessment tools and model-driven text analysis (Allwinn & Böckler, 2021; Shrestha et al., 2020) to assess the risk of potential threats, while other researchers conducted manual content and appraisal analyses (Hurt & Grant, 2019; Kupper, 2020; Ware, 2020) to detect thematic similarities and differences, as well as intent, in threats and manifestos. The application of forensic linguistic methodologies to the TRAP-18 is new.

For this research paper, the authors hypothesized that a threat assessment instrument can be applied to extremely limited data with the intention of assessing risk in the language of written and spoken communications that were ideologically based or driven by personal grievances. A conceptual content analysis (Christie, 2007) was conducted to determine the existence of predefined concepts, in this case the TRAP-18 indicators (dependent variables), in the words, phrases, and sentences within the targeted violence manifestos (independent variables). The presence and absence of warning behaviors and characteristics were measured and counted by systematically investigating the occurrences of these content categories within the text, only focusing on the content itself, regardless of what an external investigation might have revealed about the

case. An indicator was coded as present if it was measured at least once in the data, no matter how often it appeared within the text.

Example 1: The subject Jared Cano planned to bomb his former high school and shoot students and staff.⁵ One of the reasons for his violent plans was his expulsion from school, which would classify as *thwarting of occupational goals*. However, because there are no references to this incident in his manifesto, this indicator was coded as *absent*.

Example 2: The distal characteristic *changes in thinking and emotion* is complex and contains several concepts, such as (a) restrictive thinking, (b) superior beliefs and power over people, as well as (c) the emotions of anger, contempt or disgust paired with absolute and simplistic beliefs (Matsumoto et al., 2015; Meloy & Rahman, 2020).

- a. The content of this written manifesto includes references to the notion of restrictive thinking, which can be expressed through absolute words, such as:

This world has shit on me for the final time. I suffered all my life. No one ever truly loved me. No one ever truly cared about me. And all throughout my life I was ridiculed. Always beaten, always hated. (Luke Woodham)

- b. The writer of this manifesto expresses his superior beliefs and power over the people in detail by referring to himself with powerful and charming phrases, highlighting that he has risen above the people, which he in turn describes with derogative and hateful terminology:

When I look at people I see every day in society, school, and everywhere . . . I can't say I belong to same race as the lousy, miserable, arrogant, selfish human race! No! I have evolved one step above! (. . .) Majority of people in society are weak-minded and ignorant retards, masses that act like programmed robots and accept voluntarily slavery. But not me! I am self-aware and realize what is going on in society! I have a free mind! And I choose to be free rather than live like a robot or slave. You can say I have a "god complex," sure . . . then you have a "group complex"! Compared to you retarded masses, I am actually godlike. (. . .). And I'm the dictator and god of my own life. And me, I have chosen my way. (Pekka-Eric Auvinen)

⁵ This threat was successfully mitigated before he could execute his attack, and he was sentenced to 15 years in prison.

- c. The following written manifesto highlights disgust toward the human race, and specifically children, while displaying beliefs that are absolute and simplistic. The author expresses these concepts by creating a misanthropic narrative that embraces moral authority:

Humans are the most destructive, filthy, pollutive creatures around and are wrecking what's left of the planet with their false morals and breeding culture. (. . .) Focus must be given on how people can live WITHOUT giving birth to more filthy human children since those new additions continue pollution and are pollution parasitic human infants. (. . .) Civilization must be exposed for the filth it is. (James Lee)

Example 3: The spoken manifesto below includes concepts of the warning behavior *pathway*, which consists of behaviors related to researching, planning, preparing, and implementing an attack. The author expresses these notions in his language by explicitly stating his intentions, weapon of choice, location, and strategy:

My goal is at least 20 people with an AR-15 and a couple of tracer rounds. (. . .) Location is Stoneman Douglas in Parkland, Florida. (. . .) Alright, here's the plan. I'm gonna go take an Uber in the afternoon before 2:40. From there I'll go onto the school campus, walk up the stairs, unload my bags, and get my AR and shoot people down at the main, what is it the main courtyard, wait, and people will die. (Nikolas Cruz)

Example 4: The following written narrative entails evidence of a violent action imperative and time imperative, as well as signals of desperation and distress (*last resort*). This realization to take personal action *now* is communicated with words that express obligation, necessity and exaggeration:

I have [to] do this before I lose my nerve. If you take nothing else from this document, remember this: INACTION IS A CHOICE. I can no longer bear the shame of inaction knowing that our founding fathers have endowed me with the rights needed to save our country from the brink destruction. Our European comrades don't have the gun rights needed to repel the millions of invaders that plaque their country. (Patrick Crusius)

Integrating this type of forensic linguistic analysis to manifestos or other concerning communications may further validate the TRAP-18, and may assist threat assessors in detecting warning behaviors or intent of violence.

Statistical Analysis

Both descriptive and inferential statistics were applied to the data as noted below in Tables 3–6. Nonparametric statistics (Chi-squared test, Fisher's exact test) were utilized to test for significant differences between groups in Tables 4 and 5. Because of the small sample, effect sizes were not determined when significance was found. In Table 6, only the descriptive statistics were determined.

Results

Table 3 shows the prevalence of TRAP-18 indicators across all targeted violence manifestos ($n = 30$). In total, 17 out of 18 TRAP indicators (94%) were measured in this sample: 100% of proximal warning behaviors and 90% of distal characteristics, with *criminal violence* being the only behavior that was not apparent in any manifesto. The most frequent proximal warning behaviors are *leakage* (100%), *identification* (93%), *fixation* (90%), and *last resort* (87%); the least

Table 3
Prevalence of TRAP-18 Indicators Across Targeted Violence Manifestos

Indicator	Prevalence ($n = 30$) %
Proximal warning behaviors	
Pathway	57
Fixation	90
Identification	93
Novel aggression	7
Energy burst	17
Leakage	100
Last resort	87
Directly communicated threat	3
Distal characteristics	
Personal grievance and moral outrage	53
Framed by an ideology	83
Failure to affiliate with extremist/ other group	43
Dependence on virtual community	40
Thwarting of occupational goals	30
Changes in thinking and emotion	93
Failure of sexual pair-bonding	13
Mental disorder	10
Creativity and innovation	13
Criminal violence	0

Note. TRAP-18 = Terrorist Radicalization Assessment Protocol.

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Table 4*Differences of TRAP-18 Indicators Between Written and Spoken Manifestos*

Indicator	Written (n = 24) %	Spoken (n = 6) %	Statistics χ^2
Proximal warning behaviors			
Pathway	46	100	5.735 ^a *
Fixation	92	83	0.370
Identification	92	100	0.536
Novel aggression	8	0	0.536
Energy burst	21	0	1.500
Leakage	100	100	—
Last resort	92	67	2.596
Directly communicated threat	4	0	0.259
Distal characteristics			
Personal grievance and moral outrage	58	33	1.205
Framed by an ideology	83	83	—
Failure to affiliate with extremist/other group	38	67	1.663
Dependence on virtual community	50	0	5.000
Thwarting of occupational goals	38	0	3.214
Changes in thinking and emotion	92	100	0.536
Failure of sexual pair-bonding	13	17	0.072
Mental disorder	13	0	0.833
Creativity and innovation	13	17	0.072
Criminal violence	0	0	—

Note. TRAP-18 = Terrorist Radicalization Assessment Protocol.

^a Fisher's exact test significance reported.

* $p < .05$.

frequent ones are *novel aggression* (7%) and *directly communicated threat* (3%). The indicator *leakage* shows 100% because the manifestos themselves are classified as a communication to a third party of intent to do harm to a target (Meloy & O'Toole, 2011). The most prevalent distal characteristics are *changes in thinking and emotion* (93%), *framed by an ideology* (83%), and *personal grievance and moral outrage* (53%). The least common indicators are *failure of sexual pair-bonding* (13%), *creativity and innovation* (13%), *mental disorder* (10%), and *criminal violence* (0%). Without an external investigation, a mental disorder is impossible to diagnose with only manifesto data; however, three perpetrators showed signs of paranoia in their communications.

In addition, every manifesto had at least two proximal warning behaviors. The average number of proximal warning behaviors was 4.5. The highest number of warning behaviors was seven (John Earnest) and the lowest was two (*fixation* and *leakage*; Mohammed Saeed Alshamrani). The average number of distal characteristics was 3.8 across the sample.

Table 4 highlights the differences of TRAP-18 indicators between written and spoken manifestos of violence. Noteworthy is that 100% of

spoken manifestos include features of research, planning, preparing, or implementing the attack (*pathway*) in comparison to 46% of written documents. While 92% of written manifestos show evidence of a violent action imperative (*last resort*), only 67% of perpetrators signal this in verbal recordings. Moreover, 67% of spoken manifestos allude to having been rejected by an extremist group or humanity in general (*failure to affiliate*) in contrast to 38% of written narratives. Fifty percent of authors of written communications discuss their use of the internet for virtual learning or interaction prior to the act of violence (*dependence of virtual community*), whereas 0% of spoken manifestos include this indicator. The only significant difference was between the written and spoken *pathway* warning behavior.

Table 5 presents a comparison of TRAP-18 indicators in ideologically motivated and grievance-based attacks. There were no substantial differences in proximal warning behaviors. However, we recorded significant differences in distal characteristics: 100% of ideologically based attacks describe a belief that justifies the perpetrator's intent to act (*framed by an ideology*) in contrast to 38% of grievance-fueled acts of violence. These 38% consist of three subjects (Sebastian Bosse,

Table 5

Comparison of TRAP-18 Indicators in Targeted Violence Manifestos of Ideologically Motivated and Grievance-Fueled Attacks

Indicator	Ideologically motivated (<i>n</i> = 22) %	Grievance-fueled (<i>n</i> = 8) %	Statistics χ^2
Proximal warning behaviors			
Pathway	55	63	0.151
Fixation	91	88	0.076
Identification	95	88	0.597
Novel aggression	5	13	0.597
Energy burst	23	0	2.182
Leakage	100	100	—
Last resort	82	100	1.678
Directly communicated threat	5	0	0.376
Distal characteristics			
Personal grievance and moral outrage	50	63	0.368
Framed by an ideology	100	38	16.5 ^a ***
Failure to affiliate with extremist/other group	23	100	14.3 ^a ***
Dependence on virtual community	55	0	7.27 ^a *
Thwarting of occupational goals	32	25	0.130
Changes in thinking and emotion	95	88	0.597
Failure of sexual pair-bonding	14	13	0.007
Mental disorder	9	13	0.076
Creativity and innovation	18	0	1.678
Criminal violence	0	0	—

Note. TRAP-18 = Terrorist Radicalization Assessment Protocol.

^a Fisher's exact test significance reported.

* $p < .05$. *** $p < .001$.

Pekka-Eric Auvinen and Nikolas Cruz) that committed attacks at schools and showed signs of misanthropy in their targeted violence manifestos. *Framed by an ideology* was coded as present in these three instances because as previously described, we consider misanthropy as a persuasive belief system that *can* develop into an ideology. Thus, these cases were not classified as ideologically motivated attacks because their acts of violence were not primarily focused on ideologies but grievances, such as frustration, hate, and/or revenge. In addition, 55% of incidents driven by ideology mention a *dependence on virtual community*, whereas 0% of grievance-based attacks comment on this indicator, another significant finding. Moreover, 100% of acts primarily motivated by grievances report a *failure to affiliate* (e.g., family, friends, fellow students, or humanity in general) in comparison to 23% of ideologically motivated ones. Some of the ideologically fueled attacks also included grievance factors but not as their main focus. For instance, 50% of cases that were *framed by an ideology* discussed *personal grievances and/or moral outrage* in their manifestos; 32% described a major setback or failure in their

academic and/or occupational life (*thwarting of occupational goals*) as one of many factors that contributed to their decision to conduct a targeted attack. This is not out of the ordinary, as terrorists tend to be motivated by a multifaceted combination of personal, political, religious, and/or social drivers. Only 63% of personally driven attacks were coded for *personal grievance* because three out of eight subjects did not explicitly discuss any concepts that correlate with this indicator, such as a major loss of work or love.

Table 6 displays the frequency of TRAP-18 indicators across the motivations for the attacks. *Pathway* is most visible in attacks motivated by jihadism (75%) and misanthropy (75%), as well as within the group of involuntary celibates (67%). *Novel aggression* is only discussed in acts of violence motivated by other⁶ (20%) and race/ethnicity (13%). Least likely to display the indicator *last resort* are jihadists (25%), and the only *threat directly communicated to a target* is attributed to anti-government and anti-authority

⁶ Mentally ill or purely grievance-driven (revenge, frustration, hate).

Table 6
Frequency of TRAP-18 Indicators Across Primary Motivations in Targeted Violence Manifestos

Indicator	Race/ethnicity (n = 8) %	Anti-govern./anti-authority (n = 3) %	Involuntary celibates (n = 3) %	Jihadism (n = 4) %	Idiosyncratic (n = 3) %	Misanthropy (n = 4) %	Other ^c (n = 5) %
Proximal warning behaviors							
Pathway	63	33	67	75	33	75	40
Fixation	88	100	100	100	67	100	80
Identification	100	100	100	75	100	100	80
Novel aggression	13	0	0	0	0	0	20
Energy burst	50	0	33	0	0	0	0
Leakage	100	100	100	100	100	100	100
Last resort	100	100	100	25 ^b	67	100	100
Directly communicated threat	0	33	0	0	0	0	0
Distal characteristics							
Grievance/outrage	50	100	67	25	33	25	80
Framed by an ideology	100	100	100	100	100	100	0 ^b
Failure to affiliate	0 ^a	33	100 ^a	0	0	100 ^a	100 ^a
Dependence on virtual community	100 ^a	0	67	25	33	0	0 ^a
Thwarting of occupational goals	38	33	67	0	33	0	40
Changes thinking/emotion	100	100	100	75	100	100	80
Failure of sexual pair-bonding	0	0	100 ^b	0	0	0	20
Mental disorder	25	0	0	0	0	0	20
Creativity and innovation	25	33	0	0	33	0	0
Criminal violence	0	0	0	0	0	0	0

Note. TRAP-18 = Terrorist Radicalization Assessment Protocol.
^a χ^2 adjust residual >±2.0. ^b χ^2 adjust residual >±3.0. ^c Mentally ill or purely grievance-driven (revenge, frustration, hate).

incidents (33%). *Failure of sexual pair-bonding* is extremely high for involuntary celibates (100%), which is not surprising as part of their ideology encompasses the concept of failing to find a sexual partner. *Mental disorder* is prominent in attacks based on race/ethnicity (25%) and other⁷ (20%), but again, the nature of the data is likely to underestimate this indicator.

Table A1 in the Appendix features different textual samples from diverse motivations for each TRAP-18 indicator. In accordance with earlier research conducted by the first author (Kupper, 2020), various thematic similarities were detected in the content of the targeted violence manifestos. For instance, 97% of perpetrators express explicit hatred toward a specific target or group, 37% encourage like-minded and opposing groups to commit similar attacks, and 17% give tactical advice on weapons, techniques, and targets. Additionally, 47% of all authors discuss their preferred outcome of the attack—such as capture, death, or suicide by cop—while 33% allude to conspiracy theories, and 30% predict the reaction from the media and public to their act of violence.

Discussion

The main objective of this research paper was to examine the feasibility of coding a behavior-based threat assessment instrument (TRAP-18) with a thin slice of data: targeted violence manifestos compiled by lone perpetrators that planned to or committed a targeted attack ($n = 30$). The offenses occurred between 1974 and 2021, a 47-year period, and were divided into written and spoken manifestos, ideologically motivated and grievance-fueled attacks, and multiple primary motivation categories for the acts of violence. As noted in Table 3, we were able to quantify 17 out of 18 TRAP-18 indicators (94%) in our sample of targeted violence manifestos, detecting 100% of proximal warning behaviors and 90% of distal characteristics. In addition, every manifesto had at least two proximal warning behaviors. The average number of proximal warning behaviors was 4.5, with the highest number of warning behaviors being seven and the lowest being two. These general findings provide further support for the external validity of the TRAP-18 indicators. *Criminal violence* was the only indicator that was not identified in any of the communications. This does not imply, however, that none of the

perpetrators committed previous crimes. We believe that authors of targeted violence manifestos do not discuss their criminal history because they would face the risk of portraying themselves in an unflattering manner. Identifying evidence of instrumental criminal violence in the subject's past requires further investigative work on the ground. Likewise, *mental disorder* was coded in only 10% of the manifestos given the very limited ability to infer such a condition through the use of such thin slice data. Recent work concerning mental disorder has found that approximately one third of lone actor terrorists, when clinically examined, have a mental disorder diagnosis (Gill et al., 2020), a figure similar to earlier estimates (Corner & Gill, 2015; Meloy & Gill, 2016).

The most prevalent indicators in the manifestos were *leakage* (100%), *identification* (93%), *changes in thinking and emotion* (93%), *fixation* (90%), *last resort* (87%), and *framed by an ideology* (83%). These findings are consistent with other studies on targeted violence attacks and the TRAP-18, such as Islamic terrorists in Germany (Böckler et al., 2020), North American terrorists and other subjects of national security concern (Meloy et al., 2019), violent versus nonviolent Sovereign Citizens in the United States (Challacombe & Lucas, 2019), and lone-actor terrorists from the United States and Europe (Meloy, Goodwill, et al., 2021; Meloy & Gill, 2016).

In a report on 52 lone offenders who committed terrorist attacks in the United States between 1972 and 2015, the Federal Bureau of Investigation (2019) identified that 96% of these individuals had written or recorded manifestos, and 48% of them spread their content before the event. Moreover, a study on lone-actor terrorists and grievance-fueled mass murderers in the United States (Horgan et al., 2016) found that perpetrators of ideologically motivated attacks were significantly more likely to engage in *leakage*-related behaviors than grievance-based mass murderers. This included verbalizing their intent to commit violence to personal and wider audiences, or producing letters or public statements prior to their attack. Given this finding, our sample logically consisted of more acts of violence that were ideologically driven ($n = 22$) than personally motivated ($n = 8$). Horgan et al. (2016, p. 27) explained that:

⁷ Mentally ill or purely grievance-driven (revenge, frustration, hate).

Without leaking intent prior to the attack, the lone actor terrorist's actions may be depicted as the actions of a mad man rather than that of a rational terrorist. Without the ideological drivers being reported, the act cannot be an act of terrorism because it is "message-less" for all intents and purposes.

Among the least prominent behaviors were *failure of sexual pair-bonding* (13%), *creativity and innovation* (13%), *mental disorder* (10%), *novel aggression* (7%), and *directly communicated threat* (3%). These results also appear to correlate with findings from earlier studies (Böckler et al., 2020; Challacombe & Lucas, 2019; Meloy et al., 2019; Meloy & Gill, 2016), with the exception of *mental disorder*, as noted above, and *failure of sexual pair-bonding*. Previous work has found *failure of sexual pair-bonding* to be present in >80% of cases (Meloy & Gill, 2016), but in the context of a self-proclaimed manifesto, it would be highly unlikely that an offender would see his relationship failures (with the exception of an Incel⁸ ideology) as something to boldly proclaim. Such an indicator would be embarrassing unless it could be framed as a motivation for targeted violence. A multi-dimensional scaling study that visualized the relationship among the TRAP-18 indicators for lone-actor terrorist attacks (Goodwill & Meloy, 2019) also recorded a low frequency of *novel aggression* and *directly communicated threat*. Other research (Meloy & Gill, 2016) suggests that less than 20% of lone actor terrorists directly threaten their target before an act of violence, with the most obvious reason being a tactical one: "the subject does not want to lower his probability of success by forewarning the target he has selected" (Meloy et al., 2019, p. 12). The finding of a very low frequency of direct threats in *any* act of targeted violence is a very robust finding in threat assessment research—with the exception of spousal homicides where direct threats are quite common (Meloy, Hoffmann, Bibeau, & Guldman, 2021).

The warning behavior *last resort* was identified in 100% of manifestos that were primarily motivated by race/ethnicity, anti-government and anti-authority, involuntary celibates, misanthropy, and other.⁹ However, only 67% of idiosyncratic¹⁰ and 25% of jihadist attacks displayed this indicator in their communications (see Table 6). We think that jihadists may less often experience or anticipate an individual triggering event that will often stimulate *last resort* warning behavior; the mobilization for violence is instead driven by the

urgency to join in the collective martyrdom of the *shaheed* to advance a cause (Stern, 2003). The high frequency of this warning behavior, however, in all other motivational categories underscores our opinion that it should be viewed as a flashing red light when it appears in written or verbal manifestos, prompting an immediate response by investigators. In recent U.S. domestic terrorism cases, such *last resort* behavior is often driven by the belief that the subject faces an immediate and existential threat from a persecuting out-group (Berger, 2018; Hoffer, 1951). He or she must act, and must act now. In the mind of the attacker, it is a defensive emergency. *Last resort* discriminates between terrorist attackers and non-attackers (Challacombe & Lucas, 2019; Meloy et al., 2019).

The high frequency of *identification* (93%) is also noteworthy since this warning behavior has been found to discriminate between attackers and nonattackers with a moderate effect size in several studies (Challacombe & Lucas, 2019; Meloy et al., 2019). Likewise, *fixation* is quite prevalent in all targeted attacks (>80%; Meloy & Rahman, 2020), but is also frequent in subjects of concern who have no intent to attack (Meloy et al., 2019). We think that *identification* is also a flashing red light in a case since it marks the evolution from what the subject thinks about all the time (*fixation*) to whom he or she becomes (*identification*). We see this as an indicator of mobilization for violence, and when joined with *pathway* and *last resort*, should convey an immediate sense of urgency in a case.

The relatively low frequency of *pathway* in this study (46% in written manifestos) likely conveys the desire on the part of the subject to conceal specific information on research, planning, preparation, and implementation of an attack as a means to heighten the probability of success. Evidence of *pathway* was also significantly less in successful versus thwarted attackers in another study (Meloy & Gill, 2016). In a true sense, it is deliberate siloing so that the reader or listener will not know the exact plan of attack; it is good operational security. *Pathway* warning behavior is typically one of the most frequent "gatekeeper" indicators when more case data are

⁸ Involuntary celibates.

⁹ Mentally ill or purely grievance-driven (revenge, frustration, hate).

¹⁰ Mixed ideologies.

available (Meloy, Goodwill, et al., 2021); when these results are applied to threat assessment of a manifesto, the absence of a pathway warning behavior should *not* be interpreted as an absence of risk, especially when *identification* and *last resort* are present.

Changes in thinking and emotion and *framed by an ideology* are the two most frequent distal characteristics in this study. The former has been identified as a “turning point event” in a time sequencing analysis of 125 lone actor terrorists independent of this sample (Meloy, Goodwill, et al., 2021), and is considered central to the movement on a pathway to violence. *Changes in thinking and emotion* is often a relatively long-term change in interpersonal behaviors, internal fantasies (often inferred through social media intelligence gathering), and emotions expressed toward the out-group (Matsumoto et al., 2017). As Meloy, Goodwill, et al. (2021) wrote:

This may also be the indicator wherein attitudes become behaviors (Braddock, 2020), radicalization becomes fanaticism (Schoorman & Taylor, 2018), and failures in social and occupational life, incubated in fantasies of revenge, glorification, and purification (Meloy, 2018), herald violent actions.

Framed by an ideology also emerged as both present in the ideological sample (100%) but also in the grievance-based dataset (38%), suggesting both its high frequency where expected, and its unexpected presence when grievance-fueled violence is the primary driver. This is consistent with a finding in the U.S. Secret Service studies of mass attackers, which found that between 2017 and 2019 there was a diversity of ideological beliefs in 24%–30% of the attackers. “These beliefs were often multifaceted and covered a range of issues, including anti-Semitism, white supremacy, Nazism, xenophobia, antifascism, jihadism, and anti-immigration” (National Threat Assessment Center, 2020, p. 19).

Table 4 notes the virtual equivalence between written and spoken manifestos when the TRAP-18 indicators are coded, with one exception, the *pathway* warning behavior. The higher frequency of the *pathway* warning behavior among the spoken manifestos may be a product of poor operational security, and less discipline, when the offender has an opportunity to speak his mind prior to his attack. “Loose lips sink ships,” as the old World War II saying goes, speaks to the ease with which crucial

secrets may be revealed in an unguarded moment, perhaps facilitated by the clandestine excitement (Collins, 2014) of the offender and the facilitation of impulsivity by social media.

The Table 5 comparison of primary types of attacks—ideologically motivated or grievance-fueled—indicates no significant differences for the proximal warning behaviors, and suggests that such a distinction may make no difference during the active management of a threat case. However, there were significant differences for three distal characteristics: *framed by an ideology*, *failure to affiliate with an extremist or other group*, and *dependence on the virtual community*. *Framed by an ideology* is self-explanatory since it functioned as an independent variable for this particular table. *Failure to affiliate with an extremist or other group* was more prevalent in grievance-based attacks (100%) than ideologically motivated ones (23%). In our sample, the personally driven acts of violence all expressed a failure to affiliate with specific groups, such as family, friends, or classmates, or humanity as a whole. This appears to correlate with data from the comparison of U.S. lone-actor terrorists and mass murderers (Horgan et al., 2016), where grievance-fueled attackers were significantly more likely to experience being degraded or treated poorly by others, being a helpless victim or having problems with interpersonal relationships, and/or being unable to establish appropriate social relationships. The Horgan et al. (2016) finding was further validated by Meloy, Goodwill, et al. (2021), who found that *failure to affiliate* preceded most proximal warning behaviors in their time sequence analysis in a large sample of lone actor terrorists. *Dependence on virtual community* occurs in 0% of grievance-motivated attacks but 55% of ideologically based attacks. We think that the perpetrators of personally driven acts of violence in our sample did not radicalize online since their motivation was more private and personal in nature.

Table 6 documents the TRAP-18 indicators across seven refined motivational categories. Despite the small sample size for each category, the data lend support to the generalizability of the TRAP-18; regardless of motivation, the TRAP-18 can be utilized in an emerging threat case, and provides useful data to assess the risk and develop a safety plan. The generalizability of the TRAP-18 was first evident in a large sample of lone actor

terrorists ($n = 111$), who were divided into extreme right-wing, jihadist, and single-issue subjects (Meloy & Gill, 2016). This earlier study only found significant differences in *personal grievance and moral outrage*, *dependence on the virtual community*, *thwarting of occupational goals*, and *fixation*. The other 14 indicators were equivalent. Despite the thin slice nature of this present study, the generalizability of the TRAP-18 seems apparent.

The majority of perpetrators in this study communicated their intent to attack by uploading their targeted violence manifestos to social media, personal websites or image boards—often minutes, sometimes days to months—prior to their acts of violence. In an operational environment, threat assessors may be able to detect a manifesto through online monitoring, open-source research, or leads from family, friends, coworkers, or classmates. In order to determine if a case needs active risk management or monitoring, threat assessors may analyze the content of a manifesto by investigating the TRAP-18 indicators in the language of these written or spoken communications. As this study illustrates, the methodology of assessing warning behaviors in words, phrases, or sentences can be applied to a thin slice of data originating from different text types (online postings, essays, or video recordings) with diverse content and varying lengths. If a subject displays numerous signs of TRAP-18 indicators in a targeted violence manifesto, for instance *identification*, *changes in thinking and emotion*, and *last resort*, the author may be a high or imminent threat that should be investigated immediately. Notions of persuasion (encouragement of others to commit similar attacks; tactical advice on weapons and techniques) or repercussion (outcome of attack, reaction from media and public) could also be indicators of risk.

Targeted violence manifestos can not only function as essential evidence to an investigation after an attack was committed, but also act as raw intelligence that can assist in managing or mitigating a threat prior to an event. Furthermore, all forms of communication (written and/or spoken) can be analyzed under the TRAP-18 framework, as presented herein, to potentially better understand and risk manage any number of directly or indirectly communicated violent threats or ideologies. This has several implications for an operational/tactical linguist, who can offer support to the investigating authorities by:

1. Conducting an initial assessment of the language of a manifesto by analyzing the level of threat in terms of TRAP-18 and other risk indicators (immediate/fast);
2. Completing a tactical analysis of violent behaviors and risk patterns by assessing the language of several concerning communications from the same subject (short-term);
3. Performing a strategic post-incident or post-investigation examination by comparing the language of subjects that committed similar attacks to detect trends or lessons learned (long-term implications).

The TRAP-18 appears to be useful regardless of the mode of communication (written vs. spoken), type of attack (primarily ideologically motivated vs. grievance-fueled), and primary motivation (e.g., race/ethnicity or jihadism). The feasibility of coding the behavioral indicators of the TRAP-18 from extremely limited linguistic data has been demonstrated, and the theoretical model of the TRAP-18 as a structured professional judgment instrument for assessing risk in targeted violence and terrorism attacks has been further validated in this study.

Limitations and Future Research

This study has a variety of limitations. All data are retrospective and subject to the authors' hindsight bias. Without a comparison group, the discriminate or predictive validity of the findings could not be tested, and must rely on inferences from other studies where predictive validity has been demonstrated (Böckler et al., 2020; Challacombe & Lucas, 2019). In addition, the sample ($n = 30$) is relatively small and relied on open-source materials for many of the targeted violence manifestos, which raises the concern of them being incomplete or fabricated. We attempted to mediate this concern by systematically researching multiple sources to confirm the content of the manifestos. Moreover, the study lacks measurement of quantitative interrater reliability (coefficient measurement), as only the first author initially coded the behavioral indicators in the targeted violence manifestos. The second author is the developer of the TRAP-18 itself, which could raise concerns of confirmation and hindsight bias. We sought to minimize this with careful assessments, discussions, and consensus reached on whether or not the language of the manifestos met the definition of the various TRAP-18 indicators.

The data and results of this sample provide a wealth of ideas for future studies. A follow-up paper on targeted violence manifestos within the genre framework is necessary, as this study only presented a brief outline, which needs to be expanded and examined in more detail. It is also of interest to investigate how the psychological concepts of the TRAP-18 indicators are displayed in the language of the manifestos and evaluate if any grammatical, syntactical and lexical commonalities can be detected. For instance, how is the indicator *last resort* manifested in the language of the perpetrators? How do the authors convey their threats to kill? Are they direct or indirect, do they have textual substance? A follow-up study will be examining specific and structured operational applications to manifestos in a threat assessment environment.

Future research could also provide a more granular review of the results in this study and comment on similarities and differences between specific perpetrators and their primary motivations. For example, does the type of an attack—shooting, bombing, stabbing, etc.—influence the content of a manifesto? What are the differences between jihadists' and involuntary celibates' manifestos? Are manifestos authored in the 1990s different to the ones from 2010 to 2020? In addition, the findings of this paper could enhance the automated threat assessment tools that attempt to predict the likelihood of violent behavior. Examples include *Dechefr* (Mind Intelligence Lab, 2021), an artificial intelligence tool that conducts evidence-based risk analysis of written threat communications, or *Threat Triage* (Threat Triage, 2018), an algorithmic content analysis tool that assesses threatening communications from a linguistic and psychological perspective.

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(Appendix follows)

Appendix

Table A1

Textual Samples of TRAP-18 Indicators in Targeted Violence Manifestos

TRAP indicator	Example 1	Example 2	Example 3
Pathway	<p>Mohammed Reza Taheri-Azar: “I am writing this letter to inform you of my reasons for premeditating and attempting to murder citizens and residents of the United States of America on Friday, March 3, 2006 in the city of Chapel Hill, North Carolina by running them over with my automobile and stabbing them with a knife if the opportunities are presented to me by Allah. I did intend to use a handgun to murder the citizens and residents of Chapel Hill, North Carolina but the process of receiving a permit for a handgun in this city is highly restricted and out of my reach at the present, most likely due to my foreign nationality. (. . .) I have chosen the particular location on the University campus as my target since I know there is a high likelihood that I will kill several people before being killed myself or jailed and sent to prison if Allah wills.”</p>	<p>Jared Cano: “I thought I’d just run over my game plan with you all. So you can all see what I imagine is going to happen. So basically, my plan is to set a bomb here at point A, here at point B, point C and point D. I’m going to try to set them between 7 o’clock and 07:12 and set one for 07:20, no 07:26, and after they’re placed I’m going to walk to the woods outside of the parking lot where I’ll have my weapons stashed. I’m going to get there by 07:20 and gear up. Then I’m going to get to the side entrance of the school by 07:24, the bombs are blowing at 07:26 and then I’m going to enter the courtyard—see my little picture? I’m going to come in and advance on the courtyard, where there will be probably at least 50 people and this is the center piece.”</p>	<p>Patrick Crusius: “Main gun: AK47 (WASR 10)—I realized pretty quickly that this isn’t a great choice since it’s the civilian version of the ak47. It’s not designed to shoot rounds quickly, so it overheats massively after about 100 shots fired in quick succession. I’ll have to use a heat-resistant glove to get around this. 8m3 bullet: This bullet, unlike pretty much any other 7.62 × 39 bullet, actually fragments like a pistol hollow point when shot out of an ak47 at the cost of penetration. Penetration is still reasonable, but not nearly as high as a normal ak47 bullet. The ak47 is definitely a bad choice without this bullet design.”</p>
Fixation	<p>Brenton Tarrant: “I begun planning an attack roughly 2 years in advance and an attack at the location in Christchurch 3 months in advance. There was a period of time 2 years prior to the attack that dramatically changed my views. The period of time was from, beginning of April, 2017 until the end May, 2017. In this time period a series of events broke down my own reserves, my reservations, my cynicism and revealed the truth of the Wests current situation. These events turned my thoughts from pursuing a democratic, political solution and finally caused the revelation of the truth, that a violent, revolutionary solution is the only possible solution to our current crisis.”</p>	<p>Sebastian Bosse: “And in 2003/2004 [2–3 years before the attack] my life changed then. I wasn’t a human anymore. I was God-like. And I began planning this, this massacre. I wanted to kill them all, because they ruined my life. Because they, they changed my, they changed . . . the people, who are like that, who are just fuck consumers, the people change how you think. You are alone and you want to have friends, and they change completely how you think. The more you are with them, the more you become like them. And I said, “Fuck that. I’m not in this.” And it was my thing, I made the GSS [Geschwister Scholl School] massacre.”</p>	<p>Mohammed Reza Taheri-Azar: “I do not wish to pursue my career as a student any further because I have no desire to amass the impermanent and temporary fame and material wealth this world has to offer. However I made the decision to continue my studies and to graduate from the University of North Carolina at Chapel Hill so that the world will know that Allah’s servants are very intelligent.”</p>

(table continues)

(Appendix continues)

Table A1 (continued)

TRAP indicator	Example 1	Example 2	Example 3
Identification	<p>Lucas Helder: “Mailboxes are exploding! Why, you ask? (. . .) I’m here to help you realize/ understand that you will live no matter what! (. . .) Wake up people! You’re here for such a short time, why have regrets? I’m taking very drastic measures in attempt to provide this information to you. (. . .) I will die/change in the end for this, but that’s ok, hahaha paradise awaits! I’m dismissing a few individuals from reality, to change all of you for the better, surely you can understand my logic.”</p>	<p>Willem van Spronsen: “To my comrades: I regret that I will miss the rest of the revolution. Thank you for the honor of having me in your midst. (. . .) Doing what I can to help defend my precious and wondrous people is an experience too rich to describe. (. . .) I strongly encourage comrades and incoming comrades to arm themselves. We are now responsible for defending people from the predatory state. Ignore the law in arming yourself if you have the luxury, I did.”</p>	<p>Nikolas Cruz: “Hello, my name is Nick and I’m going to be the next school shooter of 2018. My goal is at least 20 people with an AR-15 and a couple of tracer rounds (. . .) It’s going to be a big event and when you see me on the news, you’ll know who I am—hehehe [laughter]. Ya’ll going to die. Pew pew pew pew pew [sounds of gunshots made with mouth]. Ah yeah, can’t wait.”</p>
Novel aggression	<p>John Earnest: “I scorched a mosque in Escondido with gasoline a week after Brenton Tarrant’s sacrifice and they never found shit on me (I didn’t realize sandniggers were sleeping inside though—they woke up and put out the fire pretty much immediately after I drove away which was unfortunate. Also they didn’t report the message I spray-painted on the parking lot. I wrote ‘For Brenton Tarrant -t. / pol’).”</p>	<p>Luke Woodham: “On Saturday of last week, I made my first kill. The date was April 12, 1997 about 4:30 p.m. The victim was a loved one. My dear dog Sparkle.”</p>	No data
Energy Burst	<p>George Sodini: “I took off today, Monday, and tomorrow to practice my routine and make sure it is well polished. I need to work out every detail, there is only one shot. Also I need to be completely immersed into something before I can be successful. I haven’t had a drink since Friday at about 2:30. Total effort needed. (. . .) I need to remain focused and absorbed COMPLETELY. Last time I tried this, in January, I chickened out. Lets see how this new approach works.”</p>	<p>Dylann Roof: “Unfortunately at the time of writing I am in a great hurry and some of my best thoughts, actually many of them have been to be left out and lost forever. But I believe enough great White minds are out there already. Please forgive any typos, I didnt have time to check it.”</p>	<p>Patrick Crusius: “I didn’t spend much time at all preparing for this attack. Maybe a month, probably less. (. . .) I figured that an under-prepared attack and a meh manifesto is better than no attack and no manifesto.”</p>
Leakage	<p>Faisal Mohammad: (wrote a transcript where he planned out the attack meticulously) “8. Cut hole in petroleum jelly in bag (vigilance!)</p>	<p>Mohammed Saeed Alshamrani: (posted his manifesto on social media) “I’m not against you for just being American, I don’t hate you because your freedoms, I hate</p>	<p>William Atchinson: (left his message on a thumb drive) “If things go according to plan, today would be when I die. I wait until the school buses are</p>

(Appendix continues)

Table A1 (continued)

TRAP indicator	Example 1	Example 2	Example 3
	<p>9. “Okay now tie your own hands together [crossed out]”</p> <p>10. Take out binder. In order from closet to door to furthest, tape everyone’s mouths.</p> <p>11. Put possessions near door. Put towel outside of them. Draw petroleum jelly line.</p> <p>12. Praise Allaah while slitting”</p>	<p>you because every day you supporting, funding and committing crimes not only against Muslims but also humanity. (. . .) You will not be safe until we live it as reality in pleastain, and American troops get out of our lands”</p>	<p>detected, then head out on foot disguised as a student. I go somewhere and gear up, then hold a class hostage and go apeshit, then blow my brains out. Work sucks, school sucks, life sucks. I just want out of this shit.”</p>
Last resort	<p>Gang Lu: “I regret that I have to take extraordinary measure to resolve this matter, but it is simply not my fault I am being a physicist who believed in the conservation of matter, energy, momentum, etc.”</p>	<p>Kori Ali Muhammad: “Black warriors mount up and ride out (. . .) My kill rate increases tremendously on the other side”</p>	<p>Robert Bowers: “I can’t sit by and watch my people get slaughtered. Screw your optics, I’m going in.”</p>
Directly communicated threat	<p>Christopher Monfort: “Start policing each other or get ready to attend a lot of police funerals. (. . .) From this day forward when police brutalize citizens, police will die. (. . .) We the people are 307 million strong and we are armed.”</p>	No data	No data
Personal grievance and moral outrage	<p>Noah Green: “The U.S. Government is the #1 enemy of Black people! (. . .) I haven’t had much to lean on the past few months, I’ve been faced with fear, hunger, loss of wealth, and diminution of fruit. (. . .) There is much confusion in this day and age in my perspective. The ongoing COVID crisis, unemployment, rising National Debt, division within the political sphere, rumors of war and the like. (. . .) I have been tried with some of the biggest, unimaginable tests in my life. I am currently now unemployed after I left my job partly due to afflictions, but ultimately, in search of a spiritual journey.”</p>	<p>Luke Woodham: “This night (June 3, 1997) is a monumentious night. With this writing, I do swear, that I shall never get myself in a position where I can be hurt by a woman ever again. (. . .) No one ever truly loved me. No one ever truly cared about me. I only loved one thing in my whole life and that was Christina Menefee. But she was torn away from me. I tried to save myself with [student’s name], but she never cared for me. As it turns out, she made fun of me behind my back while we were together. And all throughout my life I was ridiculed.”</p>	<p>Christopher Monfort: “The Seattle Police Department, as well as the Sheriff’s Department, are following a nationwide trend: attacking and arresting our free press, arresting and brutalizing peaceful demonstrators, shooting unarmed citizens, beating unarmed citizens. (. . .) These deaths are dedicated to Deputy Travis Bruner. He stood by and did nothing as Deputy Paul Shene brutality beat an unarmed 14 year old girl in their care.”</p>
Framed by an ideology	<p>Michael Zehaf-Bibeau: “To those who are involved and listen to this movie, this is in retaliation for Afghanistan and because Harper wants to send his troops to Iraq. So we are retaliating the Mujaheddin of this world, Canada has</p>	<p>Pekka-Eric Auvinen: “Of course there is a final solution too: death of entire human race. It would solve every problem of humanity. The faster human race is wiped out from this planet, the better . . . no one should be left alive. I</p>	<p>Brenton Tarrant: “All through immigration. This is ethnic replacement. This is cultural replacement. This is racial replacement. This is WHITE GENOCIDE. (. . .) To take revenge on the invaders for the hundreds of</p>

(table continues)

(Appendix continues)

Table A1 (continued)

TRAP indicator	Example 1	Example 2	Example 3
	officially become one of our enemies by fighting and bombing us and creating a lot of terror in our countries and killing us and killing our innocents. Inshallah, we'll not cease until you guys decide to be a peaceful country and stay to your own and not start going into other countries and stop occupying and killing the righteous of us who are trying to bring back religious law in our countries."	have no mercy for the scum of earth, the pathetic human race. (. . .) Today the process of natural selection is totally misguided. It has reversed. Human race has been devolving very long time for now. Retarded and stupid, weak-minded people are reproducing more and faster than the intelligent, strong-minded people. Laws protect the retarded majority which selects the leaders of society."	thousands of deaths caused by foreign invaders in European lands throughout history."
Failure to affiliate	Nikolas Cruz: "I am nothing, I am no one, my life is nothing and meaningless. (. . .) Every day I see the world ending another day. I live a lone life, live in seclusion and solitude. I hate everyone and everything. (. . .) I had enough of being told what to do and when to do. I had enough of being . . . telling me that I'm an idiot and a dumbass. In real life you're all the dumbasses. You're all stupid and brainwashed by these fucking political government programs. You will all see, you will all know who my name is."	Christopher Sean Harper-Mercer: "I have always been the most hated person in the world. Ever since I arrived in this world, I have been under siege from it. Under attack from morons and idiots (. . .) My whole life has been one lonely enterprise. One loss after another. (. . .) Though we may have been born bad, society left us no recourse, no way to be good. (. . .) Some will of course say I had so much to live for, but I don't think so. I had no friends, no girlfriend, was all alone. I had no job, no life, no successes."	Willem van Spronsen: "I am not affiliated with any organization, I have disaffiliated from any organizations who disagree with my choice of tactics."
Dependence on virtual community	Dylann Roof: "The event that truly awakened me was the Trayvon Martin case. I kept hearing and seeing his name, and eventually I decided to look him up. I read the Wikipedia article and right away I was unable to understand what the big deal was. It was obvious that Zimmerman was in the right. But more importantly this prompted me to type in the words "black on White crime" into Google, and I have never been the same since that day."	Brenton Tarrant: "From where did you receive/ research/develop your beliefs? The internet, of course. You will not find the truth anywhere else. (. . .) Were your beliefs influenced by any other attackers? I have read the writings of Dylan Roof and many others, but only really took true inspiration from Knight Justiciar Breivik."	Lukas Helder: "The future is here people, get online and to the library. Start observing, thinking, researching, thinking, understanding, and not to mention, THINKING!"
Thwarting of occupational goals	Gang Lu: "As a result, he became so mad that he refused to let me graduate in time for a precious job opportunity and is withholding my thesis result from being published in <i>JGR</i> where he serves as the	Joseph Stack: "Except that he had neglected to include the contents of Sheryl's unreported income; \$12,700 worth of it. To make matters worse, Ross knew all along this was missing and I didn't have a clue until he pointed it out in	Jim David Adkisson: "Over the years I have had some good jobs, but I always got laid off. I am now 58 years old and cannot find a decent job. They tell me I am "overqualified," which is a code term for "too damned old." I guess they just

(Appendix continues)

Table A1 (continued)

TRAP indicator	Example 1	Example 2	Example 3
	chief-editor. When he couldn't find any more excuses to prevent me from graduation, he failed intentionally to notify me as it should be that I am supposed by tradition to give a 10–15 min talk on my thesis defense before the committee members ask me questions. (. . .) That is the major reason that I am still jobless today."	the middle of the audit. (. . .) This left me stuck in the middle of this disaster trying to defend transactions that have no relationship to anything tax-related (at least the tax-related transactions were poorly documented). (. . .) The end result is . . . well, just look around."	expect me to age gracefully into poverty. No thank you! My life is done. (. . .) No one gets out of this world alive, so I have chosen to skip my oncoming bad years of going. I know my life is going downhill fast from here. The future looks bleak."
Changes in thinking and emotion	Jared Cano: "For those of you retards who don't know who I am, I'm the Freedom High School shooter in Tampa, Florida. (. . .) I'm going to do better than Breivik. Whatever he did—72? Columbine, Virginia Tech, none of them will beat me. I'll kill them all. Terror, you don't even know terror yet. I'm going to shoot everybody's brains out. (. . .) You don't even fucking know terror yet. I'm going to outdo every single one of them bitches."	James Lee: "Humans are the most destructive, filthy, pollutive creatures around and are wrecking what's left of the planet with their false morals and breeding culture. (. . .) Focus must be given on how people can live WITHOUT giving birth to more filthy human children since those new additions continue pollution and are pollution parasitic human infants. (. . .) Civilization must be exposed for the filth it is."	Elliot Rodger: "I don't know what you don't see in me. I'm the perfect guy and yet you throw yourselves at these obnoxious men instead of me, the supreme gentleman. (. . .) You will finally see that I am in truth the superior one. The true alpha male. (. . .) Well now I will be a god compared to you. You will all be animals. You are animals and I will slaughter you like animals. And I will be a god."
Failure of sexual pair-bonding	Elliot Rodger: "For the last 8 years of my life, ever since I hit puberty, I've been forced to endure an existence of loneliness, rejection and unfulfilled desires all because girls have never been attracted to me. Girls gave their affection, and sex and love to other men but never to me. I'm 22 years old and I'm still a virgin. I've never even kissed a girl. I've been through college for two and a half years, more than that actually, and I'm still a virgin. (. . .) I don't know why you girls aren't attracted to me, but I will punish you all for it. It's an injustice, a crime, because . . . I don't know what you don't see in me. I'm the perfect guy and yet you throw yourselves at these obnoxious men instead of me, the supreme gentleman."	George Sodini: "I guess some of us were simply meant to walk a lonely path. I have slept alone for over 20 years. Last time I slept all night with a girlfriend it was 1982. Proof I am a total malfunction. Girls and women don't even give me a second look ANYWHERE. There is something BLATANTLY wrong with me that NO goddam person will tell me what it is. (. . .) Women just don't like me. There are 30 million desirable women in the U.S. (my estimate) and I cannot find one. Not one of them finds me attractive."	Christopher Sean Harper-Mercer: "And here I am, 26, with no friends, no job, no girlfriend, a virgin. I long ago realized that society likes to deny people like me these things. People who are elite, people who stand with the gods. People like Elliot Rodger, Vester Flanagan, The Columbine kids, Adam Lanza and Seung Cho. (. . .) Q. How come you've not had a girlfriend, are you gay? A. No I'm not gay, girls just didn't want me."
Mental disorder	Noah Green: "It required long hours, lots of studying, and exercise to keep me balanced while	Jiverly Wong: "LET TALK ABOUT WHEN I LIVE IN CALIFORNIA. SUCH AS . . . COP USED	Kori Ali Muhammad: "UNIVERSAL INFINITE PEACE AND PROGRESS *ASE* [link] BLACK

(table continues)

(Appendix continues)

Table A1 (continued)

TRAP indicator	Example 1	Example 2	Example 3
	<p>experiencing an array of concerning symptoms along the path (I believe to be side effects of drugs I was intaking unknowingly). (. . .) After the terrible afflictions I have suffered presumably by the CIA and FBI, government agencies of the United States of America. (. . .) I have suffered multiple home break ins, food poisonings, assaults, unauthorized operations in the hospital, mind controls.”</p>	<p>24 hr THE TECHNique OF ULTRAMODERN AND CAMERA FOR BURN THE CHEMICAL IN MY HOUSE. FOR SWITCH THE CHANNEL Ti.Vi. FOR ADJUST THE FAN. FOR MADE ME UNBREATHBLE. FOR MADE ME VOMIT. FOR CONNECT THE MUSIC INTO MY EAR.”</p>	<p>DRAGON LION HAWK ASIATIC BLACK NATIONAL DEMAND [link] THE LOST FOUND ASIAIATIC BLACK NATION IN America IS TO RECIEVE THE U.S. VIRGIN ISLANDS 17 TRILLION IN IMMEDIATE MATERIAL WEALTH AND 25 YEARS OF SUPPORT.”</p>
Creative and innovative	<p>Stephan Balliet: <i>(improvised, constructed and 3D-printed most of his guns, and explains them thoroughly in his manifesto)</i> “Smith-Carbine: with 140 rounds, loaded with 2,4 gram/40 grain sulfur-less black powder (100 g KNO3 + 24 g charcoal) 9 cartridges made from brass (heavy, but reliable), 30 from cardboard (somewhat reliable, but time-consuming to manufacture per hand), and around 100 from 3 d-printed PLA (completely untested, see stream for results,.stl for them in the full upload). (. . .) I use it only if the other guns malfunction or I run out of ammo for them, since the whole deal is to show the viability of improvised guns. After all some of you fellows don’t have the luxury of industrial-made equipment.”</p>	<p>Joseph Stack: <i>(crashed his single-engine aircraft into a federal building)</i> “I know I’m hardly the first one to decide I have had all I can stand. It has always been a myth that people have stopped dying for their freedom in this country, and it isn’t limited to the blacks, and poor immigrants. I know there have been countless before me and there are sure to be as many after. But I also know that by not adding my body to the count, I insure nothing will change. I choose to not keep looking over my shoulder at “big brother” while he strips my carcass, I choose not to ignore what is going on all around me, I choose not to pretend that business as usual won’t continue; I have just had enough.”</p>	<p>Muharem Kurbegovic: <i>(was the first lone offender who bombed an airport and utilized the media to spread his manifestos in 1974)</i> “We have installed time capsules of AA4S nerve gas in following locations all to be activated by chemical timer between August and September this year. (. . .) We furthermore possess the ability to deliver an exterminating, selective and precisely timed blow to mass population centers throughout the world.”</p>
Criminal violence	No data	No data	No data

Note. TRAP-18 = Terrorist Radicalization Assessment Protocol.

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