Countering Violent Extremism – Developing a Research Roadmap: Literature Review

Prepared for

Dr. Kathleen Deloughery
Department of Homeland Security
Science & Technology Directorate
1120 Vermont Avenue, NW
Washington, DC 20005

Prepared by

Ross Owens
Jonathan Evans
Jennifer Foley
Ji Sun Lee
RTI International
3040 E. Cornwallis Road
Research Triangle Park, NC 27709

RTI Project Number 0214428.003.000

RTI INTERNATIONAL

CONTENTS

FIGURES

TABLES

1. INTRODUCTION

As the threat of violent extremism in the United States continues to grow and change, the Department of Homeland Security's Science & Technology Directorate (DHS S&T), which serves as the primary source of scientific expertise for the Department, has strengthened its resolve to develop an agile, multidisciplinary, knowledge-based capability to counter this threat. To that end, DHS S&T created a Countering Violent Extremism (CVE) Framework to guide evidence-based research intended to meet policy, operational, and public needs. The Framework is structured around several focus areas, including diverting individuals on the pathway of radicalization to violence; preventing individuals from carrying out attacks and targeting locations; mitigating the impact of extremist events; and developing individual and community resilience to violence inspired by extremism.

To ensure the Framework provides a holistic approach to CVE, DHS S&T commissioned RTI International to assess the current state of CVE research and programs, and to conduct research with stakeholders engaged in each aspect of the CVE Framework. Taken together, RTI will develop a roadmap for the future of the CVE enterprise by comparing the state of the science in CVE interventions (at both the domestic and international levels) with the current goals and operational outcomes of stakeholder organizations. This will allow DHS S&T to pursue research that meets stakeholder needs while simultaneously maximizing efficiencies. This systematic literature review across multiple disciplines, including the social and behavioral sciences, comprises the first task of this effort.

1.1 Methodology

The review of scientific literature was conducted using EBSCO and Google Scholar; for information pertaining to existing programs, Google searches were also used. Queries included common and well-established CVE nomenclature, including but not limited to:

- Countering violent extremism,
- Radicalization,
- Preventing violent extremism,
- Community policing, and
- Counterterrorism,
- Violence reduction.

Articles relevant to CVE initiatives and programs published in peer-reviewed journals between 2010 and 2016 were categorized according to the corresponding CVE theme. Literature discussing current research, existing programs, and program evaluations were

given priority.[1] ***Importantly, research and programs funded by the federal government, including DHS S&T-funded Centers of Excellence (i.e. the Consortium for the Study of Terrorism and Responses to Terrorism [START] and the Center for Risk and Economic Analysis of Terrorism Events [CREATE]), the National Institute of Justice, the Department of State, and others, are not included in this review; government-sponsored research and programs are being reviewed under a complementary effort being completed by the Naval Research Laboratory.*** The exceptions to this exclusion criteria include (1) sources providing corroborating definitions of CVE terms, (2) literature produced by RTI for DHS S&T that directly influences the present discussion, and (3) government-sponsored research and programming in fields of study and practice potentially transferrable to CVE. This review did not include an assessment of the scientific merit of the articles referenced because the purpose of this document is to inform a research agenda not identify evidence-based practices for policy makers. These are not deficiencies in the report, but rather boundaries defining the scope and purpose of this review.

This report introduces a prevention-centered CVE model supported by five major CVE concepts identified in the literature: diversion, mitigation, resilience, program evaluations, and international programs. Each concept is discussed in detail, including major themes within each area. Next, the report provides a brief overview of selected disciplines with demonstrated applications in current CVE programs and research. Finally, the report concludes by identifying noted gaps in the literature.

1.2   Radicalization and Violent Extremism: A Brief Definition

Before delving into a full discourse on preventing radicalization and CVE, it is important to understand radicalization and violent extremism as characterized in the literature, especially the conflicts that exist around these foundational definitions. In agreement with other scholars, Özerdem and Podder provide a succinct definition of radicalization: "the process of developing extremist ideologies and beliefs" (2011, p. 67; Aly & Striegher, 2012). The literature further clarifies that radicalization can be based on secular or religious beliefs (Constanza, 2012). In addition, Kruglanski et al. incorporate psychology into the understanding of radicalization by arguing that it should be thought of as a range that denotes "the extent of imbalance between the focal goal served by the extreme behavior and other common ends that people have" (2014, p. 71). Therefore, attitudinal support for violence is a low degree of imbalance, while physical support for violence indicates a high

---

[1] The extensive discourse regarding the causes of violent extremism is beyond the scope of this effort.

degree of imbalance. In contrast to the spectrum concept, Bigo, Bonelli, Guittet, and Ragazzi stress that radicalization is not "pre-terrorism" and "should not be analyzed as a linear process but as a relational dynamic" (2014, p. 6), serving as a link to the conflicting opinions on the process of radicalization.

Although all violent extremists are radicals, not all radicals are violent extremists (Aly & Striegher, 2012; Köhler 2014; Mulcahy, Merrington, & Bell, 2013; Vidino, 2010). This statement, supported by many scholars, creates a clear distinction between individual belief and efficacy leading toward moderate behaviors versus violent action. For example, "some young Muslims adopt outward physical manifestation of religiosity […] as a sign of defiance and resistance to persistent negative media and political vilification. This is considered to be a 'soft' form of radicalism" (Haider 2015, p. 9). This separation between moderate acts of defiance and extreme violence is vital, especially as it relates to developing policy and programs around the prevention of radicalization and CVE. Another important aspect to the study of radicalization is understanding that Muslims are not the only subjects of inquiry. Right-wing extremists are also the result of radicalization, and recent studies of right-wing extremism are included in this literature review. Köhler defines right-wing extremism as "the opposite of pluralism" (2014, p. 319-320). In pluralistic societies where such groups tend to exist, right-wing extremism aligns with many of the aspects of radicalization outlined in the literature.

1.3   A Prevention-Centered CVE Approach

Although the DHS S&T CVE Framework outlined above classifies CVE initiatives into one of four mutually exclusive pillars (i.e., prevention, mitigation, resilience, and diversion), a review of the literature suggests a different paradigm. Instead of a prevention pillar exclusive of the other pillars, the literature clearly indicates an organizational scheme that delineates similarities rather than mutually exclusive concepts, with each area of CVE research working in congress toward the overall goal of preventing radicalization and the occurrence of violent attacks. As Nickerson bluntly states, "[p]revention of terrorist acts is the preferred outcome of attempts to deal with the problem" (2011, p. 557). Therefore, a literature-based framework for CVE research is best depicted as a circle of knowledge and practice, with prevention at the center and the other research areas (diversion, mitigation, and resilience) and foci as cooperating concentric circles. ***Figure 1-1*** demonstrates the complementarity and dependence of the topic areas to prevention and to each other.

Figure 1-1. Circle of Knowledge and Practice for CVE Research
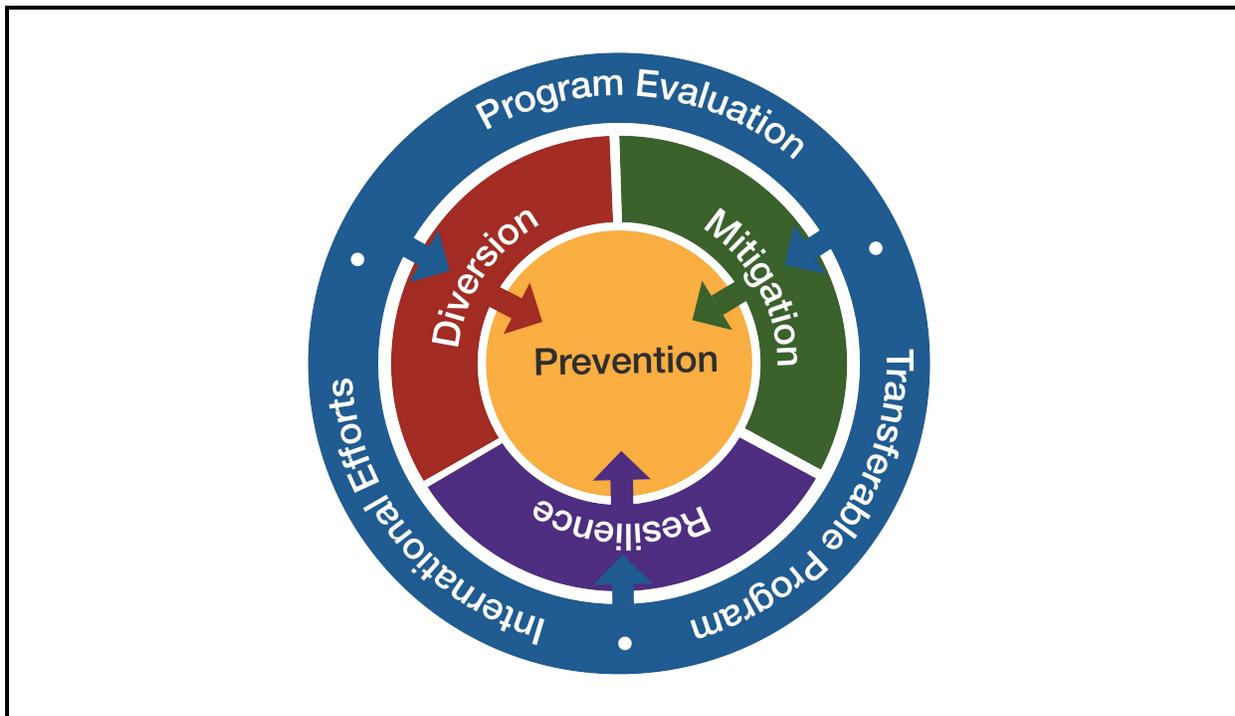
Validating this approach, Fenstermacher suggest, "[t]he goal of preventing violent extremism is to eliminate or minimize those factors that lead individuals to join violent extremist organizations or to support violent extremism" (2015, p. 10). Weine, Polutnik, and Younis corroborate Fenstermacher, when they quote the Office of the Coordinator of Counterterrorism from 2010: "the overall goal of CVE is to stop those most at risk of radicalization from becoming terrorists" (2015, p. 2). Based on the literature, the goal of the DHS S&T CVE Framework should be **prevention of violent extremism through diverting individuals from radicalization, mitigating lasting impacts of violent extremism, and building capable, resilient communities and individuals.** The literature examines diversion, mitigation, and resilience in terms of how to prevent a violent extremist event, how to predict and reduce the severity of a violent extremist event, and how to facilitate recovery after an event.

2. DIVERSION

Diversion refers to turning individuals and communities away from radicalization before they become violent extremists. A discussion about diversion must include the proposed paths and factors that lead to the radicalization process. Although debated throughout the literature, authors frequently agreed with Kate Barrelle that "there are highly individual motivational and logistical pathways in and out of radical political movements" (2011, p. 9; Aly, 2014).

2.1 Contributing Factors to and Indicators of Radicalization

One of the most commonly discussed contributors to radicalization is religion, although some argue that religion plays less of a role than other factors (Aly, 2014; Aly & Striegher, 2012; Aly, Taylor, & Karnovsky, 2014, Christmann, 2012; Ginges, Atran, Sachdeva, & Medin, 2011; Özerdem & Podder, 2011; Vidino, 2010). There are different ways religion is thought to influence radicalization. Haider (2015) presents the idea that the status of religion in secular societies can be difficult for religious individuals to handle. Purzycki and Gibson (2011) demonstrate that religion determines in-group and out-group identities, and Ginges et al. outline how these identities can have "privileged links to emotions" (2011, p. 513). Some say that Muslim violent extremists "tend to lack a firm foundation in religious knowledge," but Bartlett and Miller (2012) counter that "the difference between the terrorists and the radicals was not the level of knowledge (which is difficult to determine) but the willingness to delve more deeply into the religion, to recognize its complexity and admit one's own ignorance" (Beutel, 2010, p. 38). Bartlett & Miller (2012) and the Muslim Public Affairs Council (MPAC; 2014) note that key religious signs of radicalization include involvement in "doer" versus "talker" debates, a deep desire to determine who are unbelievers or apostates, and public clashes with mosque leadership.

Bartlett & Miller (2012) address several nuances pertaining to religion's role in the radicalization process. First, they note the willingness of violent extremists to deem others as apostates, while radicals and Muslim youths acknowledge others can be called apostates, but generally think it is rude. Also, all three groups support establishing a Muslim caliphate and following Sharia law, but for many these are simply dreams, not something actually attainable. Radicals also read literature that violent extremists revere; however, they consider the context in which such documents were written.

Other frequently described factors are the need for individual meaning, significance, and personal identity (Atran, 2010; Beutel, 2010; Borum, 2014; Brennan et al., 2015; Cerván,

2010; Christmann, 2012; Constanza, 2012; Ginges et al., 2011; Haider, 2015; Köhler, 2014; Kruglanski et al., 2014; MPAC, 2014; Schmid, 2013;); facing personal crises or transitory stages of life (Aly & Streigher, 2012; Atran, 2010; Beutel, 2010; Pels & de Ruyter, 2012), social or cultural marginalization (Aly & Streigher, 2012; Atran, 2010; Ginges et al., 2011; Haider, 2015), and lack of hope (Atran, 2010; Brennan et al., 2015; MPAC, 2014; Constanza, 2012). Despite frequent references to these in the literature, Haider (2015) finds little evidence for social marginalization being a key factor in radicalization; Beutel (2010) notes that there are many who face these concerns who do not become radicalized; and Bartlett and Miller (2013) support this finding by concluding that all three groups in their study (violent extremists, radicals, and Muslim youth) also felt these needs.

Real or perceived grievances, injustice, and discrimination (whether directed toward the radicalizing individual or to those they identify with elsewhere) emerge frequently in the literature as factors contributing to radicalization (Aly & Striegher, 2012; Aly, 2014; Aly et al., 2014; Beutel, 2010; Borum, 2014; Brennan et al., 2015; Christmann, 2012; Constanza, 2012; Haider, 2015; MPAC, 2014; Özerdem & Podder, 2010; Pels & de Ruyter, 2012; Schmid, 2013). This includes anger at geopolitical events and U.S. foreign policy (Aly & Striegher, 2012; Ginges et al., 2011; Haider, 2015). In contrast to these findings, Bartlett & Miller (2012) found that all three sampled groups felt this way.

A commonly voiced public concern is the process of internet/social media radicalization, which has emerged as a finding in some research (Aly, 2014; Haider, 2015), but Beutel (2010) questions why there is not more radicalization if so many people are introduced to radical ideas online. Brennan et al. (2015) find that internet radicalization is viable in conjunction with other factors, but not alone. Some have found that observing gory propaganda films online in a group leads to radicalization (MPAC, 2014; Bartlett & Miller, 2012).

Interpersonal bonds and the general need to belong to a group or have a sense of belonging are also factors of radicalization in their own right (Aly & Striegher, 2012; Aly et al., 2014; Beutel, 2010; Borum, 2014; Ginges et al., 2011; Köhler, 2014; MPAC, 2014; Schmid, 2013). Other factors include a sense of intergenerational disconnect (Brennan et al., 2015; Pels et al., 2012), family ties or stability, and how an individual is raised (Aly et al., 2014; Constanza, 2012; Köhler, 2014; MPAC, 2014; Pels et al., 2012). In addition, contact with violent extremists are listed by many as contributing factors (Aly et al., 2014; Aly & Striegher, 2012; Beutel, 2010; Brennan et al., 2015; Köhler, 2014; Mulcahy, Merrington, &

Bell, 2013). A contact's impact continues after someone is radicalized, as groups of militant radicals create a cycle of deepening radicalization (Mulcahy et al., 2013; Beutel, 2010). Interestingly, Ginges et al. note that "participation with friends, family, and fellow travelers in action-oriented activities, such as soccer or paintball, or even active participation in an online chat room is a good predictor of which radicals will actually branch into violence" (2011, p. 517).

Ideological and political reasons also emerge across the literature as factors in radicalization (Aly et al., 2014; Brennan et al., 2015; Ginges et al., 2011; Köhler, 2014; Kruglanski et al., 2014; MPAC, 2014). Vidino notes that "it is increasingly evident that jihadist ideology […] is the main driver behind the radicalization of some Western Muslims" (2010, p. 11), but Aly and Striegher (2012) argues political motivations are subservient to social ties. Political marginalization is listed by some as a factor for radicalization (Atran, 2010; Brennan et al., 2015), but Beutel (2010) notes that there should be more individuals radicalized if this is a main factor since many individuals are marginalized. Bartlett & Miller (2012) corroborate this since all three of their sampled groups felt alienated from the state.

Many of the reviewed researchers indicate socioeconomic reasons for radicalization (Aly & Striegher, 2012; Atran, 2010; Beutel, 2010; Cerván, 2010; Özerdem & Podder, 2010; MPAC, 2014), yet some perceive the links as weak (Aly et al., 2014; Ginges et al., 2011; Schmid, 2013; Vidino, 2010). Beutel (2010) notes that many violent extremists come from the middle classes, and others highlight that most violent extremists come from moderate educational backgrounds (Aly et al., 2014; Atran, 2010; Ginges et al., 2011). Conversely, some scholars present underemployment as a factor of radicalization (Aly et al., 2014; Atran, 2010), and Constanza (2012) states that education is often substandard in Muslim neighborhoods and the type of education provided may be a factor in the radicalization process.

Most radicalized individuals are young (Aly et al., 2014; Atran, 2010; Constanza, 2012), and several factors coincide with popular understandings of youth, including a desire for thrills or adventure and to be cool (Atran, 2010; Bartlett & Miller 2012; Borum, 2014; Köhler, 2014; MPAC, 2014; Schmid, 2013) a desire for status, honor, power, or glory (Atran, 2010; Bartlett & Miller, 2012; Brennan et al., 2015; Borum, 2014; MPAC 2014; Özerdem & Podder, 2010; Schmid, 2013) and peer pressure (Atran, 2010; Bartlett & Miller, 2012; MPAC, 2014; Schmid, 2013).

Additional hypothesized factors for radicalization include drug or alcohol abuse (Aly et al., 2014); criminal records (Aly et al., 2014); psychological disorders (Aly et al., 2014; Borum,

2014); radicalization as addiction (Brennan et al., 2015); trauma (Aly & Striegher, 2012; Haider, 2015; Mulcahy et al., 2013); history of colonization, human rights violations, and exclusion within an individual's country of origin (Haider, 2015); and lack of positive heroes (Brennan et al., 2015).

Along with the individual elements listed above, multiple pathways combining these elements into different configurations have been studied. In researching pathways to radicalization, Aly & Striegher (2012) find that it can occur after someone joins an extremist group. Several studies note that the overall pathway can be quite long, but the final stages leading to violent action can happen quickly (Aly & Striegher, 2012; Köhler, 2014). Others explain that the path of radicalization can be abandoned and an individual's presence on the path does not necessarily indicate eventual involvement in violent extremism (Aly & Striegher, 2012; Beutel, 2010; Christmann, 2012; Jenkins, 2010). Mulcahy et al. (2013) also find that some radicalization pathways include time in prison, and that extremists in the general prison population can further an organization's recruitment efforts. Overall, the stages of radicalization "are not necessarily sequential, and they can also overlap, meaning that a person may skip a stage in reaching militant action" (Christmann, 2012, p. 21). Furthermore, Bjelopera states many experts caution "against viewing the radicalization process as a 'conveyer belt,' somehow starting with grievances and inevitably ending in violence" (2012, p. 3).

Despite the many factors described above, it is vital to keep in mind Christmann's finding that "the common characteristic among Islamic extremists is just how normal they are" (2012, p. 31). Violent extremists may present some similarities, but as Bartlett & Miller (2012) point out, there may be too much overlap with the general public in many factors identified within these studies. Furthermore, Jenkins suggests "there is no easily identifiable terrorist-prone personality, no single path to radicalization and terrorism…the transition from radical to terrorist is often a matter of happenstance" (2010, p.7). This may factor into the success of counterradicalization and general diversion programs described in the subsequent section.

2.1.1   Summary of Indicators:

▪ The causes of radicalization are debated, but the more commonly proposed factors include religion, social or political marginalization, quest for personal identity and belonging, real or perceived grievances, and online propaganda.

- There are also different theories on how the factors leading to radicalization play off each other and result in a radicalized individual.

- There is no single profile or pathway for radicalization; many people who do not radicalize are exposed to the same factors that supposedly lead others to radicalization and violent extremism.

2.2   Diversion Programs

Diversion, or counterradicalization, measures can include programs that promote integration, community outreach, and counternarratives (Haider, 2015). Aly observes, "just as there is no single path to violent extremism, programs and initiatives that aim to prevent individuals from engaging in violence should also be multi-faceted, comprising diverse strategies and approaches" (2014, p. 64). These programs can work at an individual or community level, but there are general principles for successful diversion programs, which include active listening and dialogue facilitation, rather than lectures (Sheikh et al., 2010). It is also important to involve persons who radicals view as credible, even though selecting someone with the necessary authority and knowledge can "present difficulties in government expressing a preference for strands of religious ideology, as well as the practical task of selecting creditable conversation partners" (Christmann, 2012, p.41). Studies also show that youth involved in the process have "far stronger social, psychological, and developmental competencies, leading to adaptability, resilience, and a long list of positive developmental outcomes" (Brennan et al., 2015, p. 6-7). In addition, Brennan et al. (2015) argue that instilling empathy in targeted individuals is key to diverting radicalization.

Schmid (2013) presents a useful list of principles for diversion programs: understand the perspective of those being targeted; be flexible since no individual or community is the same; have clear metrics of success and conduct evaluations; recruit a wide base of partners, not just those representing one viewpoint (Brennan et al., 2015; Vidino, 2010); encourage local efforts rather than national ones; train front-line responders from teachers to law enforcement; minimize the focus on counterterrorism (Haider, 2015); develop programs with input from the public, academic, and civil society; and prepare for criticism. Opinions differ regarding the wisdom of including nonviolent extremists in diversion programs; therefore, such activities can prove controversial in a community (Vidino, 2010; Haider, 2015).

At the individual level, a common diversion approach is to stage an intervention with the radicalized individual. MPAC finds that trust and respect raise the chances of an intervention's success, and they recommend the following broad stages in an intervention, although each intervention is unique: listen, "understand the person's references and sources"; "provide the person comfort"; and "give alternatives and consistently follow up" (2014, p. 86-88). They also note that people beyond an organization's core intervention team may be necessary, "for instance, if the person of concern happens to be a high school student, the core team may want to pull in one or two teachers who may know the student fairly well" (MPAC, 2014, p. 74). It is important, though, to assess the situation carefully, as "being the focus of an intervention could actually deepen a person's path toward violence because it will be seen as 'cool' or give the person more respect in the eyes of his/her extremist peers" (MPAC, 2014, p. 93).

Several other individual activities are also suggested to divert individuals from extremism, including training them to advocate for peaceful political solutions, engaging in mentoring, and encouraging parent-child dialogue. To discredit extremist propaganda online, experts recommend that the material be viewed and discussed "under mature and expert supervision, such as a religious scholar, parent, mentor or some other respected community member," instead of telling curious youths to not watch certain material (MPAC, 2014, p. 51-52).

At the community level, there are several approaches that have been attempted, with varying success. Economic efforts may not be enough to alter the path of radicalization, instead efforts should focus on promoting and helping youth achieve their goals (Atran, 2010). Encouraging political participation and allowing grievances to be expressed are also useful activities (Aly et al., 2014; Brennan et al., 2015). A broader effort is to "de-sensationalize terrorist actions […] and reduce their fame [so] the thrill will die down" (Atran, 2010, p. 7). Community-level programs can also target internet messages coming from violent extremists. Brennan et al. (2015) argue that countermessaging is critical in this effort and should involve civil society and potentially governments. However, Beutel notes that shutting down extremist websites is ineffective, and in fact validates the extremist message while violating civil liberties and pushing internet traffic to the untraceable dark web, which "limits disengagement and de-radicalization efforts by cutting off communication to people who need it most" (2010, p. 22).

Religious education efforts also occur at the community level. "Simply removing people with problematic views from the mosque is not enough to prevent acts of violence" (MPAC, 2014,

p. 10), but educating youth on theology, particularly through debate and discourse is successful (Christmann, 2012). There is agreement that youth programs should occur in informal settings, allowing youth to guide the discussion and to feel safe (Christmann, 2012; Sheikh et al., 2010).

Conversely, in formal settings, such as schools, intervening against xenophobia can make a difference (Pels & de Ruyter, 2012). However, in these more formal settings there is a high degree of emphasis on CVE, and some community projects have been modified to include CVE topics to attract additional funding. This creates feelings of stigmatization among targeted communities (Bigo, Bonelli, Guittet, & Ragazzi, 2014; Haider, 2015) and has the potential to lead to further alienation (Vidino, 2010).

There are also arguments against counterradicalization programs with detractors stating that these programs violate fundamental rights, can be discriminatory, and hamper social cohesion (Bigo et al., 2014). For example, Sahar Aziz argues that CVE programs unjustly target Muslim communities (Aziz 2011a; 2012) and attempt to police expressions of faith such as Muslim charities (2011b). Other programs have been accused of attempting to promote a single mainstream interpretation of Islam above alternatives (Rascoff, 2012). Haider makes the telling argument that the efficacy of such programs has seen little research "because results are hard to measure. It is difficult to attribute the absence of a terrorist attack, for example, to a particular initiative" (2015, p. 9).

One organization attempting to address many of the grievances American Muslim communities raise about CVE and community policing programs is the World Organization for Resource Development and Education (WORDE), whose primary mission is to enhance communication and understanding between Muslim and non-Muslim communities (Mirahmadi & Farooq, 2010). One of WORDE's primary goals is to empower so-called "moderate muslims" to police their own communities through "community-led, earlier interventions" (Mirahmadi & Farooq, 2010, p. 16). Moderate Muslims are those who "support religious freedom, non-violent conflict resolution, and the preservation of the U.S. Constitution," which describes the majority of American Muslims (Mirahmadi & Farooq, 2010, p. iii). Unfortunately, as Mirahmadi and Farooq state, one of the main challenges is "[moderate Muslims in the United States] tend to be underfunded and lack the necessary institutional capacity to effectively compete with Islamists (2010, p. 26). Accordingly, moderate Muslim scholars are the best candidates to both provide "re-education for radicalized youth," and to serve as leaders in community-led CVE efforts (Mirahmadi & Farooq, 2010, p.20). Furthermore, Mirahmadi and Farooq note that policy makers and

politicians should publically and vocally support grassroots moderate Muslims leaders and bring them into the mainstream spotlight (2010, p. 21-22).

Additional guiding principles for diversion programs may be gleaned from the discussion of deradicalization programs within ***Section 4, Resilience***.

2.2.1 Summary of Diversions

▪ Key components of effective diversion programs include active listening and dialogue facilitation, credible voices, flexibility, wide base of partners, and local efforts rather than national ones.

▪ Possible diversion activities include providing individual interventions, training individuals to advocate for peaceful political solutions, providing mentoring, encouraging parent-child dialogue, and watching propaganda online with youth so you can discuss the fallacies with them.

3. MITIGATION

"Terrorists score victories whenever they can disrupt the normal functioning of a society or segment thereof by arousing anxieties, raising suspicions, or promoting people's distrust of each other and of their institutions" (Nickerson, 2011, p.556). Mitigation strategies are the collection of individual measures, taken before a violent event, to save as many lives as possible, reduce damage to infrastructure, and preserve the normal functioning of society during and in the aftermath of an attack. CVE literature related to mitigation comprises research from several different fields, including public policy, disaster resilience, economics, cultural geography, building science, game theory (Carter, 2015; Kaplan, 2015), and hospital administration, as well as articles from various professional journals aimed at first responders and emergency personnel. The literature discussed in this section focuses predominantly on CVE; literature with similar methodologies and aims not related to CVE are discussed in *Section 6, Transferable Programs*.

It is important to note that the line between mitigation and resilience is blurry since the degree of resilience to a violent event is often directly related to the mitigation efforts that took place before the event. Stevens et al. assert "[p]erceived individual coping with terrorism, at both general and incident-specific levels, represent viable intervention targets as part of population preparedness initiatives and may support broader community adaptation to this threat." (2012, p. 10). This suggestion underscores the value of conceptualizing CVE as a connected circle of knowledge and practice instead of isolated pillars.

3.1   Mitigating Terrorism through Globalization

Researchers claim that globalization mitigates terrorism's effects, but they qualify that it can cause a general rise in terrorist activities (Choi, 2015; Younas, 2015; Zimmermann, 2011). Schneider, Brück, & Meierrieks posit that "international linkages […] and modern means of communication are expected to contribute to a more rapid spread of violence across borders, which may increase the politicoeconomic vulnerability of societies to terrorism" (2015, p. 131). But Younas counters by stating that "although all types of terrorism depress growth, globalization [in general] dissipates these consequences of terrorism" (2015, p. 150). He further concludes, "…a commitment to reforms geared for greater openness is not just a source of economic growth; it also appears to be an effective tool in containing the harmful effects of terrorism in developing countries" (2015, p. 150). Zimmermann, citing a report by Krieger and Meirerrieks (2009), corroborates Younas's findings, but asserts "there

are also studies in which this relationship is less strong or does not at all exist" (2011, p. 153). Zimmermann continues to suggest that the gulf between the various bodies of research on globalization, economic growth, and terrorism exists because of a lack of precision in the "definition of different types of political terrorism, reporting, data collection and coding methods, and consequent inadequacies in analysis" (2011, p. 153).

The need for a conventional method of analysis is clear, but a lack of common terminology may prevent its development and subsequent adoption. More recently, however, Choi's investigation of 127 countries from 1970 to 2007 attempts to provide a conclusive analysis of the role of economic growth on terrorist activities—an "understudied" topic whose "previous empirical results are mixed and inconsistent" (2015, p. 172). Choi's discussion differs from previous studies in two ways; it divides economic growth into two sectors (agricultural and industrial) and categorizes terrorism into three forms (domestic, international, and suicide). He concludes that while industrial countries are less likely to be victims of domestic and international terrorism than agricultural countries, they are more likely to experience suicide terrorism. These findings suggest that hardening potential targets will deter domestic and international terrorism, but countries already prone to suicide attacks (such as Iraq, Pakistan, and Afghanistan) may see a rise in these types of attacks as they become more industrialized.

3.1.1   *Summary of Mitigating Terrorism through Globalization:*

- Research shows that globalization often does lead to an increase in terrorism; but globalization mitigates the consequences of terrorist attacks.

- Countries with high rates of suicide terrorism may experience even higher rates of incidence as they become more industrialized.

3.2   Preparing for Extreme Events

Extreme events, like terrorism, are a class of outcomes that carry severe consequences, but have a low probability of occurrence. Accordingly, they represent a difficult area for analysis and research (Fischbacher-Smith, 2010; Fischbacher-Smith, 2011; Fischbacher-Smith & Fischbacher-Smith, 2013). Fischbacher-Smith suggests that many may overlook studying past extreme events "due to the fact that they are not representative of the 'normal' state of affairs within the 'system' under consideration" (2010, p.1). In addition, near misses (events that are either prevented or fail) are also overlooked and often not analyzed as they should be. In many cases, near misses reinforce the current system without proper evidence. Dillion, Tinsley, and Burns concur stating, "near-misses are interpreted as

disasters that did not occur and thus provide the perception that the system is resilient to the hazard, people illegitimately underestimate the danger of subsequent hazardous situations and make riskier decisions" (2014 p. 1907). Fischbacher-Smith and Fischbacher-Smith note in their evaluation of hospitals as potential targets, "[i]t is the normality of the process that creates problems for management; ultimately resulting in failures that escalate to a point at which managers can no longer control the system" (2013, p. 333). For example, Adams and Berry's survey of health care personnel finds that staff are very willing to report to duty in the case of events such as an explosion with mass casualties or a radiologic event, but there are some barriers to their ability to report for duty, such as childcare responsibilities (2012).

3.2.1 Summary of Preparing for Extreme Events:

▪ Extreme events are difficult to study, as they are often not representative of the system under normal circumstances.

▪ "Near misses" (events that are prevented or fail) are often not analyzed enough, and may reinforce flawed systems and lead to riskier decisions.

3.3 Predicting and Preparing For Violent Events

Being able to confidently make decisions based on empirical data is a key component of implementing mitigation measures. Akgun, Kandakoglu, and Ozok argue, "[f]or combating [terrorism], [a] vulnerability assessment against terrorist attack is [an] initial and crucial step" (2010, p. 3561). Stewart (2010) states that since 2001, over $300 billion has been spent on counterterrorism measures, including $90 billion on infrastructure. He continues, "While there is often a high degree of certainty about [counterterrorism] protective expenditure, there is considerable uncertainty about the benefits of such expenditure" (2010, p. 30). In a separate article, Stewart cites Mueller's (2006) claim that "probably most of the money and effort expended on counterterrorism since 2001 has been wasted," suggesting that costs of expenditures have not been properly weighted against the number of lives potentially saved (2011, p. 431). For example, Stewart (2008, 2010) demonstrated previously that hardening potential targets such as bridges and buildings are not cost effective unless they are national icons, but thickening cockpit doors are nearly always cost-effective measures.

Nickerson suggests, "[e]ssential to both prevention and preparedness is anticipation of acts of terrorism that are likely. Equally essential for preparedness is identification of the consequences of such acts" (2011, p. 560). Akgun, Kandakoglu, and Ozok (2010) have

developed a step-by-step approach to assessing the vulnerability of different targets known as the Fuzzy Integrated Vulnerability Assessment Model (FIVAM). FIVAM is based on fuzzy set theory, Simple Multi-Attribute Rating Technique (SMART) and Fuzzy Cognitive Maps (FCM) methodologies in a group decision-making environment. Although their assessment focuses on airports, their formula can be applied to any "critical facility" such as dams, government offices, harbors, power plants, or hospitals (Akgun, Kandakoglu, and Ozok, 2010, p.3562).

Preparing personnel for violent attacks is equally important. "Among the more important lessons learned from retrospective studies of responses to large-scale natural disasters is the necessity of effective coordination of relief and government agencies that typically respond to such incidents" (Nickerson, 2011, p.562). Murphy and Ellson (2010) provide recommendations for firemen responding to targeted buildings; Xiang and Zhuang (2014) propose a medical resource allocation model for serving emergency victims with deteriorating health conditions; and Adini and Peleg (2013) examine Israel's mass-casualty response model, which is now in place at nearly every hospital and health clinic across the country and includes universal guidelines for mobilizing emergency responders, police, hospital staff, and even bystanders in the immediate aftermath of a terrorist attack. Uniform protocols and training for all staff likely to be affected by a violent extremist event is one of the most effective mitigation strategies in Israel's CVE portfolio since staff from different areas of the country can immediately go to work wherever they may be when the event takes place and seamlessly initiate response procedures (Adini & Peleg, 2013). One alternative to a nationwide response plan would be simply to post warnings and directions that would provide instruction in the event of an attack (Nickerson, 2011, citing Mayhorn, Yim, & Orrock, 2006).

3.3.1   *Summary of Predicting and Preparing For Violent Events:*

- The costs of mitigation efforts need to be empirically weighed against the potential benefits (i.e., number of lives saved).

- Fortifying buildings and bridges are often not cost-effective measures, but smaller measures, such as hardening cockpit doors, are.

- First responder teams, including police, firefighters, and hospital staff, need to operate under one united procedure.

4. RESILIENCE

Resilience refers to the ability of communities and individuals to bounce back from all hazards (Aly et al., 2014; Brennan et al., 2015; Sherrieb et al., 2012). This section outlines activities and behaviors communities can follow to have resilience, and also presents research on disengagement and the process of deradicalization, whereby former violent extremists can become resilient.

4.1 Community Resilience

Silver & Fishhoff (2011) note that Americans are quite resilient, but this resilience is aided when the government provides information so Americans can respond appropriately to whatever violent extremist events occur. They also describe the importance of leadership being able to maintain the public's trust during such an event and of keeping people connected to their preexisting social supports. In addition, Watson, Brymer, and Bonanno highlight five principles that the government should follow in the face of extremist events: "(a) promoting a sense of safety, (b) promoting calming, (c) promoting a sense of self-efficacy and community efficacy, (d) promoting connectedness, and (e) instilling hope" (2011, p. 484). This desire for hope is mirrored in the report written after the Boston bombings: "Intentionally building a public narrative of strength and resilience may help to nurture this underlying substrate of community toughness" (Leonard, Cole, Howitt, & Heymann 2014, p. 43). For communities to be resilient, they must be prepared for the impact attacks can have on their citizens, in particular psychological trauma.

The psychological impacts on the general population after a disaster "generally are limited and transient, with increased incidence of psychopathology likely only among populations with preexisting vulnerabilities (e.g., prior psychiatric illness) or actual direct exposure (e.g., loss of a loved one due to the disaster)" (Eisenberg & Silver, 2011, p. 472). The ability to positively cope is key to emotional stability after a disaster, as is social support (Eisenberg & Silver, 2011; Watson et al., 2011). Fortunately, most disaster survivors do not need mental health care and the general consensus is that "severity of exposure to the event and severity of post-event stresses and adversities" (Watson et al., 2011, p. 483) are the strongest predictors of psychological need after an event, but systematic research into what factors within an individual make them more resilient are lacking and better screening tools are needed (Neria et al., 2011). However, in the wake of a tragic event, such as a terrorist attack, it is known that several guiding principles should be followed by mental health professionals: local stakeholders need to be involved to ensure cultural sensitivity;

services should target as many individuals as possible; services need to be promoted through community leaders; and mental health professionals need to be part of interdisciplinary teams (Watson et al., 2011).

Posttraumatic stress disorder (PTSD) can present in individuals after terrorist attacks, as was evidenced after 9/11 (Schneier et al., 2012; Neria, DiGrande, & Adams, 2011). General rates of PTSD fell in the months after 9/11, but some of those particularly impacted by the attacks (such as first responders and residents of lower Manhattan) saw increases in PTSD. Also, those who experienced additional traumatic events in the wake of 9/11 saw increased rates of PTSD. Interestingly, those who had only indirect exposure to the 9/11 attacks (such as those watching television broadcasts across the country) also experienced PTSD because of the attacks. According to Neria and colleagues, indirect exposure is "relatively new to the discipline of PTSD research and deserves further attention" (2011, p. 441).

Youth face unique challenges in the aftermath of extremist events. The amount of treatment youth receive and parental reaction to the disaster can impact their psychological development and influence the remainder of their lives. As with the general population, most youth recover from extremist events without psychological treatment, but young children exposed to television images of the events in later weeks may think the events are happening again (Eisenberg et al., 2011; Moscardino et al., 2014).

Besides the need to address the psychological impact of extremist events on a community's youths, youth resilience can also be created by teaching youths to "build social cognitive resilience to violent extremism," as evidenced by a program in Australia (Aly et al., 2014, p. 369). Through the program, the students came to understand better the humanity of the victims of the Bali terrorist attack. Students felt the program helped them discuss issues and reflect on their own values. An evaluation of the program identified some success was achieved "by engaging participants in constructing violent extremism as unjust and inhumane; creating empathy with victims of violent extremism; developing self-efficacy in resisting violent extremism influences and responding to influences in positive, productive ways and considering the devastating impacts of violent extremism" (Aly et al., 2014, p. 383).

Stevens et al. provide useful insights into the public's perception of threat, which is a key element in building resilience in a community (2012). Their research delineates that "high perceived coping and higher concern is the most consistent predictor of terrorism preparedness behaviors and evacuation intentions" (2012, p. 1). Their work to better understand the public's perception of threat as it correlates to preparedness behavior also

identified a gap: the need for government agencies, such as emergency planners, to aid and assist low-income individuals with limited education in preparing for extremist events.

4.1.1   Summary of Community Resilience:

▪   Resilience is aided when governments provide enough information for citizens to respond appropriately to whatever violent extremist events occur, and they do so while maintaining the public's trust.

▪   Governments should promote safety, calm reactions, and connectedness in the face of extremist events.

▪   Extremist events can lead to mental health concerns, including PTSD.

4.2   Individual Resilience

Of particular relevance to CVE resilience is the deradicalization of individual violent extremists. As Schmid states, however, "if radicalization is a fuzzy concept, the same is by extension also true for de-radicalization" (2013, p. 40). Although there are many different definitions of deradicalization, it is key to separate deradicalization from disengagement (and Barrelle [2011] also distinguishes social reintegration). Disengagement simply refers to having left an extremist group, but the extreme views may still be held by the individual. Deradicalization refers broadly to the abandoning of radical views and beliefs, and deradicalization can even occur without disengagement (Aly & Striegher, 2012; Barrelle, 2011; Schmid, 2013; Vidino, 2010).

The process away from radicalism is multifaceted and complex, similar to the path toward radicalization. Some leave because they discover their efforts are ineffective. Others want things that cannot happen while living as a radical, such as getting a job (Barrelle, 2011; Schmid, 2013; Spalek & Davies, 2012). Dalgaard-Nielsen (2013) emphasizes doubt as a motivator: doubts about a group's ideology (perhaps by seeing how complex an issue really is); doubts based on internal group conflicts and leaders not upholding the group's ideals; or personal doubts (such as the impact of involvement on family members) (Köhler, 2014; Kruglanski et al., 2014). Other reasons include exhaustion, burnout, emotional toll, stress, increased contact with non-extremists, or rejecting violence (Barrelle, 2011; Dalgaard-Nielsen, 2013; Kruglanski et al., 2014; Schmid, 2013; Spalek et al., 2012). Kruglanski et al. (2014) note that some individuals may perceive that their goal was in fact obtained, thus freeing them to deradicalize.

The disengagement and deradicalization processes are not necessarily permanent, and the difficult nature of both makes reradicalization or reengagement probable. Difficulty can arise from a lack of skills or social networks, lost identity and need to develop a new one, loss of direction or belonging, and integration with a new community. However, those who leave a radical life voluntarily tend to do better in postradical life than those who leave because of arrest or forced disengagement (Barrelle, 2011). Furthermore, Horgan points out that "people who leave terrorism behind statistically have a low chance of re-engagement" (2014, p. 2), but researchers do not know why (Bigo et al., 2014). However, foreign fighter involvement in a plot aimed at the West increases the likelihood it "will come to execution, and it doubles the likelihood that the plot will kill people" (Hegghammer, 2013, p. 11).

There are currently no tools to measure effectively deradicalization or disengagement. Collecting data on this topic is difficult, and it is hard to determine the success of individual programs (Kruglanski et al., 2014; MPAC, 2014; Schmid, 2013; Spalek et al., 2012). Indeed, not many evaluations of exit programs have been conducted, although "behavioral disengagement—staying clear of crime and remaining disengaged from the extremist scene—are typically the key indicators of success in the European programs" and they are generally seen as successful (Dalgaard-Nielsen, 2013, p. 100). Also, Horgan claims that "the most effective de-radicalization programs serve as a kind of halfway house for former extremists. They help prisoners to prepare for the challenges of reinserting themselves into everyday life" (2014, p. 3).

General principles for exit and postexit support programs from Dalgaard-Nielsen include using narratives "to reduce resistance to persuasion" (2013, p. 99), not pushing an exiter to become more radical, establishing credible go-betweens, working with the existing doubts, and being flexible. Schmid (2013) suggests additional key principles, such as voluntariness, trust, involvement of former extremists for credibility, the need for training, connections to other programs, independence from the state, long-term support, consideration of the participant's broader networks, and nonengagement with partners lacking in legitimacy.

Spalek and Davies (2012) further promote the role of mentoring in rehabilitation, even though there is controversy with this approach and no consistent best practices. In general, they recommend that such programs for former members of violent extremist groups include befriending, safe spaces for discussion, a variety of mentors, and a focus on the future. The challenges to mentoring included adapting the free-flowing nature of mentoring programs to structured government programs, whether mentoring should focus on community cohesion or liberal freedoms, and the degree of connection to law enforcement.

But even with the critiques against mentoring, Spalek and Davies found that "working with individuals through mentoring schemes can help build emotional and other resilience within the communities that these individuals belong to or associate with, so that the impact of mentoring schemes can go beyond the individual" (2012, p. 20).

4.2.1   Summary of Individual Resilience

▪ Individual resilience includes deradicalization or disengagement programs, which need to address the multitude of potential reasons for leaving radical groups, including exhaustion, rejection of violence, reaching one's goal, and wanting a job.

▪ Support programs should be independent from the state, should not push an individual to become more radical, should establish credible go-betweens, and should be flexible.

▪ The disengagement and deradicalization processes are not necessarily permanent.

5. PROGRAM EVALUATION

Despite the growing investment in CVE research and programming worldwide, the efficacy of many of these efforts remains unknown. Even a cursory glance at the literature reveals that very little research is being done to examine the extent to which policies and programs implemented to date are, in fact, achieving their intended goals (Freese, 2014). Though CVE programs continue to multiply, Horgan and Braddock note that a striking concern is "…that the claims of success associated with several programs have not been validated or supported" (Horgan & Braddock 2015, p. 156).

Freese (2014) and Horgan and Braddock (2015) are not the only researchers to highlight the marked absence of evaluation data. In 2011, for example, the Terrorism Research Initiative published a list of "50 Un- and Under-researched Topics in the Field of (Counter-) Terrorism Studies"; evaluation was second on the list. The concern regarding the lack of evaluation data in CVE continued through 2012 and 2013 when academic events were held in Ottawa, Canada, to discuss measuring the effectiveness of and evaluating CVE programming (Fink, Romaniuk, & Baraket, 2013). A few researchers have gone further and quantified the lack of evaluation data. In their study *Countering Violent Extremism (CVE) Risk Reduction Project*, the Qatar International Academy for Security Studies (QIASS) reported that of the programs they visited in France, Indonesia, Northern Ireland, Singapore, and Great Britain, none boasted systematic outcome data that could be used to evaluate the programs (Soufan et al., 2010). Perhaps the bleakest view was presented by Lum, Kennedy, and Sherley in their 2006 Campbell Systematic Review *The Effectiveness of Counter-Terrorism Strategies*. In it, they reported that "[f]rom over 20,000 studies we located on terrorism, we found only seven which contained moderately rigorous evaluations of counterterrorism programs" (Lum et al., 2006, p. 3).

The good news, however, is that while evaluation efforts may be largely absent, there is widespread agreement that this is a necessary direction for CVE research. A primary finding from the Ottawa symposium was that "practitioners share a common understanding of the importance of evaluating CVE programming" (Fink et al., 2013). Echoing the sentiment of the Ottawa participants, QIASS researchers reported that although this represents a "critical deficiency" in the global effort to combat violent extremism, "nearly everyone thinks systematic program evaluations are important, but no one does them" (Soufan et. al, 2010, p. 3).

5.1   Challenges in CVE Evaluation

Despite agreement that "[i]t is no longer a question of whether, but how to conduct these evaluations," a change of course is not likely to occur overnight (Fink et al., 2013, p. 2). Evaluative work in the CVE arena has not necessarily been avoided for lack of researcher interest; it is an inherently difficult undertaking. A longstanding challenge in assessing terrorism-related research and programming is that success is, by definition, a nonevent; this is also referred to as "measuring the negative" (Fink et al., 2013, p. 2). Measuring nonevents is extremely difficult, and researchers and practitioners are acutely aware of this challenge. Similarly, the outcome of interest—a terrorist event—is rare. Lack of data from which to draw makes it difficult to identify trends among the acts themselves and the perpetrators. Participants at the 2012 Ottawa workshop, for example, voiced concern about "drawing a line of causality between the desired outcomes that we observe (nonradicalization or nonviolence) and a specific prevention initiative" (Romaniuk & Fink, 2012, p. 10). Adding to the complexity, Vidino (2010) suggests that in the context of deradicalization, even most comprehensive programs are unlikely to be a complete success. If perfection is unlikely, he poses a question regarding the threshold for success: "if one hundred individuals go through a deradicalization program and only a handful of them revert to terrorism, how is the program to be assessed?" (Vidino, 2010, p. 10).

At the most basic level, "there is not a shared view of what CVE is or how it should be done… The lack of a clear definition for CVE not only leads to conflicting and counterproductive programs but also makes it hard to evaluate the CVE agenda as a whole and determine whether it is worthwhile to continue" (McCants & Watts, 2012, p. 1). Relatedly, Romaniuk and Fink (2012) observed that a significant amount of work has occurred in the prevention space. Many of those tasked with implementing components of CVE programs are not traditional CVE players, nor do they desire to be. Taken altogether, "the range of activities that serve the aims of counterradicalization is potentially unlimited" (Neumann, 2011 as cited in Romaniuk & Fink, 2011, p. 5).

In addition to the overarching considerations described above, evaluation at the program level poses its own set of challenges. Challenges range from conceptual, such as elaborating a theory of change, to practical, including the identification of the objectives and scope of the evaluation, metrics selection, and identification of an evaluator (Romaniuk, 2015).

Participants at the 2013 Ottawa symposium also noted numerous operational challenges, many of which were echoed by participants at the 5RD Workshop to Counter Violent Extremism (Lee, Evans, & Foley, 2015), as follows:

- Limited availability of expert evaluators, particularly those suited to evaluate CVE programs;

- Obtaining funding to complete evaluations without diverting investment from core programming;

- The relationship between governments, practitioners, and evaluators;

- Ensuring receptivity to results;

- Securing the political will to learn from evaluations; and

- Integrating evaluations into programs at the design stage.

5.2 Existing Evaluation Literature

Even though program evaluation as a subset of research within CVE may be in its infancy, there is not a complete absence of published literature. Table 5-1 lists the non-U.S. government sponsored research conducted to date in the area of CVE evaluation along with a brief description of each (in reverse chronological order).

Table 5-1.   Non-U.S. Government Sponsored Research

Title	Brief Description
Learning and Adapting: The Use of Monitoring and Evaluation in Countering Violent Extremism- A Handbook for Practitioners- published by Canadian government (2014)	This handbook is designed to "support CVE policy-makers and practitioners (those who design, manage and evaluate CVE programmes), by providing them with key terms regarding violent extremism and radicalization, describing the purpose of evaluation, and providing examples key methodologies they can employ to conduct monitoring and evaluation (M&E)… The handbook will enable readers to understand why, when and how to conduct an evaluation of a CVE policy, programme or project" (Dawson, Edwards, & Jeffray 2014, p. 1).
Synthesis Report on the State-of-the-Art in Evaluating the Effectiveness of Counter-Violent Extremism Interventions, published by IMPACT Europe (2014)	The primary objective of the effort was to "analyse the state-of-the-art in terms of radicalisation leading to terrorism and violent extremism factors, programmes tackling radicalisation leading to terrorism and violent extremism, and methods to evaluate their effectiveness" (van Hemert et al., 2014, p. 1).
Evidence-Based Counterterrorism or Flying Blind? How to Understand and Achieve What Works. (2014)	Freese reviews the state of and challenges to terrorism research and evidence-based counterterrorism practice. She proposes a framework for the research needed to develop evidence-based counterterrorism programs. Freese posits that there is a need for a concrete infrastructure of evidence-based practice and quality improvement in counterterrorism to ensure the best national security outcomes (2014).

(continued)

Table 5-1.   Non-U.S. Government Sponsored Research (continued)

Title	Brief Description
A Utilization-Focused Guide for Conducting Terrorism Risk Reduction Program Evaluations. (2013)	Williams and Kleinman employ "a utilization-focused evaluation perspective to ask the big question regarding so-called deradicalization programs: how to evaluate the degree to which a given terrorism risk reduction initiative reduces post-detainment terrorism engagement. Its dual objectives are: (a) to provide a roadmap for conducting such an impact analysis with a utilization-focus, and (b) to highlight some of the unique challenges (both methodologically and theoretically) that face evaluators in the context of evaluating terrorism risk reduction initiatives. Additionally, the appendices of this work contain both a process checklist for conducting an impact analysis of such initiatives, and an evaluation self-assessment tool" (2013, p. 102).
CVE Through Communications Seminar: Monitoring and Evaluation Techniques for CVE Communication Programs. Conference Handout (2013)	This document is a compendium of efforts conducted by other researchers; it shares evaluation examples, evaluation manuals and toolkits pertaining to CVE evaluation with an emphasis on communications (Nashat, 2013).
Evaluating Countering Violent Extremism Programming (2013)	Presents the results of a 2-day international symposium convened specifically to focus on "evaluating CVE programming specifically and on sharing good practices to inform the design and further development of projects and programming undertaken by practitioners in government and civil society" (Fink, Romaniuk, & Barakat 2013, p. 1).The report provides a detailed discussion of challenges and emerging practices in the area of CVE evaluation.
Review of programs to counter narratives of violent extremism (2013)	This report addresses counternarratives, including development of a countermessaging spectrum composed of government strategic communications, alternative narratives, and counternarratives. The review assesses the state of knowledge regarding efforts to counter narratives of violent extremism and provides recommendations that governments can use to guide their work in this area (Briggs & Feve, 2013).
From Input to Impact Evaluating Terrorism Prevention Programs (2012)	Developed using input from interviews with experts and government officials, a literature review, and discussions during the 2012 "Colloquium on Measuring Effectiveness in Counterterrorism Programming," this report addresses foundational questions in CVE evaluation, such as "Is the turn toward prevention an effective response to the diverse extremist threats that states face today? How can effectiveness of prevention be measured? What approaches have states advanced in evaluating the impact of terrorism prevention initiatives? In responding to this challenge, can lessons be gleaned from efforts to evaluate programs in related policy domains?" This report serves as the precursor to the 2013 report Evaluating Countering Violent Extremism Programming noted above (Romaniuk & Fink, 2012, p. 2).

(continued)

Table 5-1.   Non-U.S. Government Sponsored Research (continued)

Title	Brief Description
Community Cohesion and PREVENT: How Have Schools Responded? (2011)	This effort used a mixed methods approach to "assess the effect on schools and local authorities of implementing the duty to promote community cohesion and the extent to which schools are aware of, and undertaking activities to contribute to, the [United Kingdom's] PREVENT strategy" (Phillips, Tse, & Johnson, 2011, p. 6).
Counterterrorism Measures in the Netherlands in the First Decade of the 21st Century. Published by Netherlands Ministry of Security and Justice (2010)	This comprehensive report evaluates the counterterrorism measures that were implemented in the Netherlands (2000-2010). It addresses the following: evaluation method used; counterterrorism methods used; application of the framework of analysis to five specific measures; the application of measures in specific cases; and trends and findings.
Monitoring and Evaluation Tools for Counterterrorism Program Effectiveness-published by the Center on Global Counterterrorism Cooperation (2011)	Provides readers with information regarding the evaluation of preventative programs. It discusses the challenges in measuring these programs and offers recommendations for conducting them.
Rehabilitating the Terrorists? Challenges in Assessing the Effectiveness of De-Radicalization Programs. (2010)	Horgan and Braddock (2010) present an overview of the results of a 1-year pilot study of select de-radicalization programs and investigates critical issues surrounding assessment of their effectiveness and outcomes and suggest the applicability of the Multi-attribute Utility Technology (MAUT) to risk reduction programs.
Comparative Evaluation Framework for Counterradicalization. Public Procurement Network (PPN) Working Paper (2010)	This paper provides an "evaluation framework for counter-radicalisation, for use at local, regional and national levels, as well as comparatively between PPN countries" (Institute for Strategic Dialogue, 2010, p. 1).

5.3 Practitioner Needs

A conversation regarding the information and tools that will benefit practitioners pursuing CVE program evaluations was held at both the 2013 Ottawa symposium and the 2015 5RD Workshop to Counter Violent Extremism. Although the events were held 2 years apart and in two different countries, there was significant overlap between the needs that arose. Participants noted a particular need for the following:

▪   A compilation of existing evaluation practices and models;

▪   A database of standardized typologies of evaluation terms and practices;

▪   A dialogue for training government practitioners and their civil society counterparts; and

▪   A handbook of evaluation practice for civil society.

Program evaluation is a growing concern for those involved in CVE research and programming, and the calls to action grow louder. Lum et al. (2008) noted an abysmal and

conspicuous absence of evaluation research in 2006; disappointingly, little had changed when Freese (2014) revisited the issue 8 years later. As previously noted, not only is it important to ensure that CVE programs are meeting their intended goals, it is imperative that such programs are not unintentionally *counterproductive* to CVE efforts. Furthermore, as noted by Vidino (2010) and the participants at the 5RD Workshop to Counter Violent Extremism, the ability to measure program effectiveness is emerging as a top priority as governments are increasingly called upon to justify their investments in CVE.

5.4   Summary of Program Evaluations

- There is a striking absence of evaluation data in CVE, but there is widespread agreement that it is needed.

- Evaluating CVE efforts is very difficult because of both the nature of the threat and operational challenges.

6. INTERNATIONAL PROGRAMS

Because individual countries experience different threats and degrees of violent extremism, a universal consensus on how to prevent violent extremism or prosecute those responsible does not exist (Coolsaet, 2010 McCants & Watts, 2012). Particularly pronounced in Europe, individual countries are plagued by different terrorist organizations with unique agendas, operating at varying levels of intensity. Accordingly, individual members of the European Union respond to violent extremist acts through differing preventative measures (Briggs & Feve, 2013; Center for Security Studies, 2014; Coolsaet, 2010; Fink et al., 2013; Lee et al., 2015; Ranstorp & Hyllengren, 2013; Zeiger & Aly, 2015). Although experiences abroad are different, U.S. policy makers should take advantage of all opportunities to learn from allies, since many have been dealing with both homegrown and imported terrorism for much longer than the United States. The following section will present a brief overview of a few particularly successful CVE programs and agendas from other countries, as discussed in the literature.

6.1   Australia

Hosted by DHS S&T, the 2015 5RD Workshop to Counter Violent Extremism aimed to share experiences and future areas of interest in the field of CVE (Lee et al., 2015). The concerns and priorities noted by Australia were similar to other participants; Australia is primarily concerned with "reducing the risk of homegrown terrorism by strengthening resilience to disengage from violent extremist influences and beliefs" and top priorities include rolling out a national intervention framework, neutralizing propaganda, and measuring the impact of CVE policies and programs. Chief among their research questions are whether observed online behaviors relate to what is actually happening in society, what motivates such behavior, and how do surveillance organizations "filter out the noise?" Bergin et al. 2015 also note that some barriers to radicalization, such as family or age are, not always present in online forums, underlining the need to understand how online communities communicate.

6.2   Canada

Also in attendance at the 5RD Workshop, Canada reported having a "decades-old history of terrorist activity, but like other countries, the threat has recently increased" (Lee et al., 2015, p. 5). Canada's prevailing strategy is the identification of those at risk of radicalization in its earliest stages. To that end, Canada noted the following three priorities: engagement with the community, training and sensitization for law enforcement, and focused intervention. In the past 5 years, two programs were established to promote these

goals—Kanishka and The Canadian Safety and Security Program (CSSP). Now nearing its final year, Kanishka was launched as a 5-year, $10 million initiative to invest in research on terrorism and counterterrorism "with an emphasis on preventing and countering violent extremism" (Lee et al., 2015, p. 6). Launched in 2012, the CSSP spends approximately $43.5 million annually to solicit competitive proposals for research, make targeted investments to CVE programs, and develop local communities to become more resilient to radicalization. These two programs embody the three policy goals outlined in Public Safety Canada's 2014 *Public Report on The Terrorist Threat to Canada*: engagement, training and sensitization, and focused intervention. Of primary importance to the CSSP are "communities of practice" (CoPs) composed of subject matter experts sharing knowledge and resources. Each CoP is led by a subject matter expert who serves as a leader in his or her own community, as well as a liaison between the different CVE communities. It is important to note that members of Kanishka work closely with those in the CSSP, underscoring Canada's perceived value in cross-agency and cross-program cooperation.

The use of narratives are also becoming increasingly prevalent in Canada's CVE diversion portfolio (Lee et al., 2015). Smith details six semifictional narratives used to divert youth from radicalization, saying, "The narratives neither moralize, nor pass judgment, but present violent extremists as fully formed human beings—a white supremacist reflects on his own failings; a Muslim convert foreign fighter remembers his childhood; an eco-extremist talks about her doubts and hesitations" (2015, p. 41). Shown to approximately 250 people in Canada's Muslim community, Smith reports that "[participants'] awareness and understanding of violent extremism had increased, as had their ability to recognize the signs of radicalization to violence in others. More importantly, most felt confident that they know whom to contact for information, help, and support" (2015, p. 41).

6.3   Germany

Germany is a republic with 16 fairly autonomous states of varying sizes. Accordingly, the majority of CVE initiatives originate at the state level, not the federal (Ranstorp & Hyllengren, 2013). Interestingly, the five largest states in Germany report the lowest level of "Islamic activities" according to Ranstrop and Hyllengren; but an estimated 900 people in Germany have "Islamic terrorism potential" and around 250 have participated in terrorism training abroad (2013, p. 10). Furthermore, another 230 are suspected to have traveled to civil war battlefields in Syria (Köhler, 2013). Germany, in particular, has several community and family-focused counselling programs aimed not only to divert at-risk individuals from extremism, but also to provide outreach and support for their families.

One of the most successful and well-funded program is the Hayat program (Hayat being the Turkish and Arabic word for "life") run by the Zentrum Demokratische Kultur [Center for Democratic Culture] (Ranstorp & Hyllengren, 2013; Köhler, 2013; 2014). Hayat is specifically designed to address the foreign fighter phenomenon through community coaching. Köhler describes Hayat as "a family counselling program available for every relative, friend or otherwise attached person [e.g. teacher] of individuals on the path of radicalization [violent and non-violent] at any stage" (2013, p. 182). Specifically, Hayat's main goal is to prevent foreign fighters and other "highly radicalized individuals from leaving, prevent them from turning violent once they have left, and finally convince them to return to their home countries" (Köhler, 2013, p. 182). Furthermore, Hayat serves as a bridge between security authorities and civil society.

"Team meX" is a cooperative project between the Landeszentrale für politische Bildung Baden-Württemberg and the Landesamt für Verfassungsschutz Baden-Württemberg, and is designed to provide youth with tools to "recognise and prevent anti-democratic and Islamic convictions among young people" without compromising their religious teachings (Ranstorp & Hyllengren, 2013, p. 16). These tools are made available through downloaded workbooks on their website, and are designed to be administered to groups by trained volunteers working with Team meX. Topics include countering right-wing extremism, countering homophobia and sexism, providing information on the role of religion in Islamic life, and providing a primer for children entering elementary school (Landeszentrale Für Politische Bildung Baden-Württemberg, n.d.).

6.4   The Netherlands

In 2004, Dutch film maker Theo van Gogh was murdered by Dutch-born Islamic radical Muhammed Bouyari. Van Gogh's murder led many to believe that the main threat of terrorism came from within The Netherlands itself (Ranstorp & Hyllengren, 2013), and "catalyzed a debate over the Dutch model of multiculturalism" (Rabasa, Pettyjohn, Ghez, & Boucek, 2010, p. 140). As a result, the Dutch cities of Rotterdam and Amsterdam launched several CVE initiatives such as Wij Amerstammers (We Amsterdamers), intended to strengthen the resilience of religious institutions and promote social inclusion, and Information Switch Point Radicalisation (ISPR) focusing on "identification, intervention, control, and dispersal of extreme radicalized manifestations" (Ranstorp & Hyllengren, 2013, p. 14). Additionally, from 2007-2011, more than 82 local projects were begun and over 4,000 community workers trained on CVE. "Since the Dutch attribute radicalization to sociopolitical issues, not religion, their counterradicalization strategy specifically aims to

enhance social cohesion by facilitating the integration of alienated groups into mainstream society" (Rabasa et al., 2010, p. 141). The most exemplar of these programs, known as the Slotervaart Project (Christmann, 2012), consist of seven measures to not only identify radicalization in its earliest stages, but to strengthen communities vulnerable to radicalization from within by promoting vocational and educational opportunities and facilitate cooperation between community and religious groups (Ranstorp & Hyllengren, 2013).

6.5   Pakistan

CVE discussions about Pakistan occur in myriad overlapping contexts because the fact it experiences one of the highest degrees of domestic terrorism while simultaneously exporting terrorism to other countries such as the United Kingdom (Ranstorp & Hyllengren, 2013). It is also argued to be one of the most strategically important countries for the United States and the Muslim world, given its geographic, political, economic, and cultural influences in the region (Mirahmadi, Ziad, Farooq, & Lamb, 2016). Domestic studies of terrorism in Pakistan have been conducted across various topics, such as using the Pakistani stock market to predict terrorist attacks (Aslam & Kang, 2013), incidence of suicide attacks on health care professionals (Mazhar & Rizvi, 2015), and even the responsibility of intellectuals to denounce radical rhetoric (Naqvi, Kazim, & Huma, 2010). It is encouraging that despite the prevalence of violent extremism in Pakistan, it is home to "one of the most robust civil societies in the developing world, with over 100,000 civil service organizations (CSOs) operating across the country" (Mirahmadi et al., 2016, p. 190). Mirahmadi et al. continue to detail the various CSOs operating within the county, and other government-led initiatives such a radio station in the Swat valley aimed to de-legitimize terrorist propaganda (2016). They conclude by suggesting western nations such as the United States should continue to support the various CSOs operating within Pakistan.

6.6   Somalia

Like Pakistan, Somalia is both a host and exporter of violent extremism. Ranstorp and Hyllengren briefly describe Somalia's CVE initiatives as mostly "de-radicalisation programmes includ[ing] the internment of defected al-Shabaab members in camps where they are very inactive and where several are addicted to the drug Khat" (2013, p. 19). Al-Shabaab, according to Menkhaus, has gained notoriety (and success) through its savvy use of social media platforms such as Twitter: "Al-Shabaab's most effective approach has been its clever exploitation of the Somali diaspora's sense of alienation, identity crisis, and lack of purpose" (2014, p. 313). By live-tweeting terrorist attacks in real time, re-tweeting

followers, and engaging with politicians and organizations all over the world, al-Shaabab has cleverly inherited and promoted a "Somali grievance narrative that was already well formulated by the time the group came into existence" (Menkhaus 2014, p. 320).

Somalia differs from Pakistan in the failure and corruption of its CSOs. Samar Al-Bulushi, an anthropologist specializing in transnational governance, militarism, and the security state in East Africa, concludes her analysis of peacekeeping efforts in Somalia suggesting, "While it is on the streets of Kismayo that violence is made real, it is in the bureaucratic offices of Mogadishu, Nairobi, and New York that it is imagined—as necessary, as legal, as civilizing, and as peace keeping" (2014, p. 35). This point underscores the need for evaluating CSO efficacy, authority, and ongoing role in theatres hosting and exporting terrorism.

6.7   The United Kingdom

The United Kingdom delegation to the 5RD Conference reported that homegrown Islamic extremism is among its top concerns (Lee et al., 2015), and Hughes (2014) reminds readers that the United Kingdom has experienced violent right-wing extremism in Northern Ireland for nearly a century. Two of the more effective measures enacted by the United Kingdom are known as "Contest" and "Channel." Contest "aims to reduce overall risks to the United Kingdom and its interests overseas from terrorism" (Lee et al., 2015, p. 8) by challenging extremism ideologies, providing outreach to those vulnerable to radicalization, and addressing community grievances (Ranstorp & Hyllengren, 2013). Contest is composed of a four-part strategy: pursue, prevent, protect, and prepare. Channel, a community-based referral program focused on Islamic and right-wing extremism, uses existing cooperation between different community leaders and authorities to assess risk for referred individuals and provide an appropriate response to prevent radicalization. In his review of the research on preventing religious radicalization, Christmann (2012) was only able to identify two UK programs specifically designed to address Islamic radicalization"—the Muslim Contact Unit (MCU) and the "Street" Project, both located in London.

6.8   Other Countries Identified in the Literature

The literature includes several countries that are not extensively addressed. Although there are worthwhile evaluations, discussions, and analyses, we omitted these countries from this report for one of three reasons: (1) only mentioned briefly in larger reports such as Rabasa et al.'s (2010) "Deradicalising Islamic Extremists"; (2) appeared only once in a compendium such as Zeiger and Aly's (2015) collection of articles called "Countering violent extremism:

Developing an evidence-base for policy and practice"; or (3) were collected opportunistically.

6.8.1   Summary of International Cooperation

- Individual countries experience violent extremism to varying degrees, and their approaches to CVE are often motivated by unique forces.

- One example of a successful commonality across different international programs is the emphasis on engaging communities with individuals who are most at risk of radicalization.

- Countries who host and export violent extremism, such as Pakistan and Somalia, require continued support through economic and educational investments to divert individuals from the path of violent extremism.

- Nations benefit by sharing examples of successful CVE programs and by working together to achieve common goals.

7. TRANSFERABLE PROGRAMS

As Weine, Polutnik, and Younis note in a START research brief, "the overarching goal of CVE is to stop those most at risk of radicalization from becoming terrorists" (2015, p. 1). A rational-choice model of CVE assumes that actors do not turn to violent extremism as a result of mental illness, but from a variety of environmental, legal, and cultural reasons (Zimmermann, 2011). Accordingly, CVE policymakers need to understand related disciplines such as social work, criminal justice, anthropology, education, economics, and public health to build a holistic portfolio designed to address root causes of radicalization leading to violent extremism and for models that might be applicable to CVE. The following discussion presents literature on disciplines with the potential to considerably contribute to CVE efforts, although this is not an exhaustive list of disciplines contributing or potentially transferrable to CVE research.

7.1   Criminal Justice

Criminal justice is a discipline with perhaps the most direct relationship to CVE given its direct involvement with individuals who are either already engaged in violent extremism, or are most at risk of becoming radicalized. In 2014, the Department of Justice's Office of Community Oriented Policing Services (COPS) released an educational booklet titled "Community Policing Defined." In it, they detail a criminal justice philosophy called community policing and promote "organizational strategies that support the systematic use of partnerships and problem-solving techniques to proactively address the immediate conditions that give rise to public safety issues such as crime, social disorder, and fear" (2014, p. 1). The COPS philosophy advocates that simply responding to crimes committed is not enough. Instead of solely using punitive deterrents to address crime, officers must earn the trust of community members and empower them to become stakeholders in their own safety. This approach is reflected in the diversion literature, and is endorsed by the White House (President's Task Force on 21st Century Policing, 2015). In general, CVE-related criminal justice literature can be grouped into three different categories: community policing, evidenced-based policing, and diversion from gang-related activities.

7.1.1   Community Policing

Common throughout recent community policing literature is the idea of a holistic approach to CVE-related aspects. Community policing is commonly presented as a positive deradicalization program combatting violent extremism. However, the blurring of community outreach and intelligence gathering activities has damaged community relations

with law enforcement and the government (Bigo et al., 2014; Akbar, 2015). For example, many in the Muslim community feel increased scrutiny and alienation because of their religious beliefs; this has led some Muslim communities to feel that counterradicalization programs have been aimed at them, which has perpetuated negative stereotypes.

In a Campbell Collaboration Systematic Review titled *The Effects of "Pulling Levers" Focused Deterrence Strategies on Crime*, Braga and Weisburd (2012) review an approach known as "pulling levers." This consists of identifying a particular problem and assembling an interagency working group that might include police officers, social workers, and even prominent members in the community to conduct research, identify key offenders, and frame an appropriate response using available community resources (i.e., the various levers). Braga and Weisburd conclude that 9 of 10 studies on this approach report "strong and statistically significant crime reductions," but they remain concerned with the lack of rigorous randomized experimental evaluations" (2012, p. 25).

Weine et al. (2015) conducted 100 ethnographic interviews and observations of the Los Angeles Police Department and leaders in the Muslim-American community to assess the differences between traditional community policing and policing with CVE as the goal. They identified seven necessary components to a CVE approach: engaging with specific communities, promoting knowledge and awareness of violent extremism, partnering with leaders of at-risk populations, problem solving with communities, mitigating risks by "enhancing integration of immigrants and refugees" and encouraging the development of community-led prevention, changing organizations by "building capacity among immigrant and refugee orientation," and measuring outcomes through research and evaluation.

7.1.2 Summary of Community Policing

- Community policing seeks to engage the community proactively to CVE through cooperation, rehabilitation, mentoring, and outreach, rather than strictly punitive means.

- "Pulling levers" refers to law enforcement, social workers, and community leaders coming together to determine targeted interventions designed to divert individuals from the path of violent extremism. Its efficacy shows promise, but more rigorous evaluation is needed.

7.1.3 Evidence-Based Policing

Peter Greenwood defines "evidenced-based practice" as a program or strategy "that has been evaluated through rigorous scientific study using experimental or quasi-experimental methods" (2010, p. 1). He claims, "there is an ever-expanding universe of lists and

resources purporting to identify the most effective programs and strategies for reducing youth crime and violence and juvenile delinquency" but many of these programs remain unevaluated for efficacy (2010, p. 1). In his report, Greenwood attempts to methodically evaluate several programs and rank them based on evidence supporting their efficacy, and concludes "[the] literature clearly demonstrates that there are many programs and strategies that can reduce the likelihood of future offending by at-risk youth" (2010, p.6). However, he also states that there is considerable variations in costs, effectiveness, and reliability of supporting evidence.

Carter, Phillips, and Gayadeen's 2014 study provides an example of the type of research needed to evaluate many of the "best-practice" lists and conventions in circulation. Similar to evidence-based policing, Carter et al. describe intelligence-led policing (ILP) as "built upon best practices established by community policing while emphasizing an integrated information, or evidence-based, decision making to help inform strategic resource allocations or inform patrol officers of emerging trends and tactics in jurisdictional crime" (2014, p. 434). Instead of redefining the role of police in the community, ILP "re-imagines how police can be smarter" in their duties (Carter et al., 2014, p. 435). In their study, Carter et al. identify a growing corpus of ILP literature, and attempt to fill the gap in understanding how organizations implement intelligence-led policing strategies (such as "information sharing and data analysis") through the use of a web-based survey (2014, p. 433). Although he found that the agencies surveyed do display a firm grasp of ILP measures, they recommend future studies "should include an exploration of appropriate ILP models across varying agency sizes and community compositions" (2014, p. 440).

Van der Laan, Smit, Busschers, and Aarten's 2011 evaluation of prevention and intervention strategies for reducing sexual exploitation serves as an additional example of the type of evaluation needed for evidenced-based policing. After identifying 19,000 studies on trafficking between 2000 and 2009, they concluded that "[p]olicies or interventions to prevent or suppress cross border trafficking for the purpose of sexual exploitation have not been evaluated rigorously enough to determine their effect" (2011, p. 6). Furthermore, "none of these were controlled and most did not even use pre- and posttest measures" (van der Laan, 2011, p. 6).

7.1.4 *Summary of Evidence-Based Policing*

▪ Evidenced-based and intelligence-based policing employ best practices and empirical research to target specific issues and make "police smarter in their duties" (Carter et al., 2014, p. 435).

▪ Many programs that claim to be evidence based have not been subjected to rigorous evaluations.

7.1.5 Gang Diversion

Gang diversion is well represented in the criminal justice literature and should be included in CVE discussions. In his review of current gang prevention programs, James Howell (2010) draws several conclusions that can be directly applied to diverting individuals from violence such as strengthening families and schools, improving community supervision, training teachers and parents how to manage disruptive youth, and teaching students interpersonal skills necessary to navigate society without resorting to violence. Gorman-Smith, Kampfner, and Broman (2013), Tolan, Henry, Schoeny, Bass, Lovegrove, and Nichols (2013), and Roman et al. (2012) echo Howell's suggestion, and all advocate for an increased emphasis on community- and family-based interventions to reduce youth vulnerability to engaging in violent extremism, or becoming victims themselves. Corroborated by much of the CVE literature, Higginson et al. (2015) and Hennigan, Maxson, Sloane, Kolnick, and Vindel (2014) suggest that youth populations are the most vulnerable to both radicalization and victimization from violent extremism. Thus, research and funding for diversion programs should be aimed at youth populations.

An example of such a program is the Gang Resistance Education and Training (G.R.E.A.T.) program. Originally designed by the Phoenix Police Department, it is now administered in schools across the country through the Bureau of Justice Assistance and the Office of Juvenile Justice and Delinquency Programs. It aims to deter students from joining gangs, prevent violence and criminal activity, and promote positive student–law enforcement relationships. Ebensen, Osgood, Peterson, Taylor, and Carson (2013) evaluated both the original program and its revised curriculum to determine if the revisions were more or less effective in achieving the program's goals. Programs like G.R.E.A.T. should be continually evaluated and revised to counter address changing dynamics of recruitment to violent extremist organizations such as gangs.

7.1.6 Summary of Gang Diversion

▪ Literature specific to diversion from gang activities can be applied to CVE programs, research, and evaluations.

▪ Examples of successful gang diversion measures include strengthening families and schools, teaching parents and teachers how to effectively manage disruptive youth, and teaching youth interpersonal skills needed to succeed in society.

7.2   Public Health

Public health research and programs are designed to identify, track, and alleviate health issues such as infectious diseases, chronic illness, natural disaster resilience, and bioterrorism on a macro scale. Markiewicz et al.'s 2012 survey on epidemiologists in North Carolina hospitals found that public health professionals are uniquely capable to link effectively health agencies (such as the Centers for Disease Control and Prevention or World Health Organization) to local hospitals and clinics in the case of a public health emergency. In the case of a biological or radiological attack, the role of public health officials is clear and includes "surveillance, detection, and monitoring of community-acquired infections and potential bioterrorism events;" assisting local health department investigations; educating clinicians; enhancing communication between the varying levels of the health system; and conducting special studies designed to mitigate the impact of the event and buffer resilience (Markiewicz et al., 2012, p. 7). These same methodologies can be adapted to mitigating and buffering resilience to a myriad violent extremist events.

One example is the Los Angeles County Community Disaster Resilience (LACCDR) project, a community-centered program designed to increase disaster resilience. Eisenman et al. evaluated LACCDR's toolkit, using a pretest–posttest with control group design, with 16 communities in Los Angeles County and concluded that LACCDR "is a significant opportunity and effort to operationalize and meaningfully measure factors and strategies to increase community resilience" (2014, p. 8476). Public health can also influence resilience on a national scale, as evidenced by Holman, Garfinb, and Silver's (2013) survey comparing the impact of media versus direct exposure on acute stress response after the Boston Marathon Bombings. Their investigation suggests that mass media such as television, social media, and radio may amplify and disperse negative consequences of community trauma beyond directly affected communities. As the world becomes increasingly interconnected, studies on such a scale can offer valuable observations.

7.2.1   Summary of Public Health

▪ Public health professionals are uniquely equipped to develop and implement protocols designed to mitigate health consequences of natural disasters, large-scale violent extremism, and infectious disease outbreak.

▪ Public health researchers can investigate and evaluate large-scale, collective traumatic events to operationalize meaningful improvements to health systems during and immediately after events take place.

7.3   Education

In the penultimate section of the August 2011 edition of the journal *Perspectives on Terrorism*, Alex Schmid lists "Countering radicalisation and violent extremism in schools and religious institutions: evaluating existing programs" as number 27 of the 50 "un- and under-researched topics in the field of (Counter-) Terrorism Studies (p. 76). Scholarly database searches using queries such as "countering violent extremism in schools/universities," "preventing violence in schools," "preventing violent extremism in schools," "radicalization in schools/universities," and "programs for countering violent extremism in schools" within the years 2010 to 2016 did not yield a significant amount of relevant articles for CVE research or programs. Almost all of the semirelevant articles focused specifically on bullying, dating violence in adolescents in general, or discussed "violence in schools" in very broad contexts. Discussion of gang activity and gang violence is not included in this section, as it is covered briefly in the Criminal Justice portion of this report.

A few notable articles do offer actionable observations that could inform better understanding of some overlooked causes of violence in schools are present in the literature. Two studies using 2009 National Youth Risk Behavior Survey (YRBS; n=16,410) data demonstrate that sleep deprivation (Hildenbrand, Daly, Nichols, Brooks-Holliday, & Kloss, 2013) and the school environment (Johnson, Burke & Gielen, 2011) are both significant promoters of engaging in school violence–related behaviors such as carrying a weapon to school, bullying, missing school because of feeling unsafe, and being threatened or injured with a weapon at school. These studies are corroborated by recent publications from the University of Virginia's Virginia Youth Violence Project (Konold & Cornell, 2015; Mehta, Cornell, Fan, & Gregory, 2013; Eliot, Cornell, Gregory, & Fan, 2010), whose mission is conduct research on effective methods and policies for youth violence prevention and school safety.

Studies of violence in schools often neglects the impact on teachers, however. Maring and Koblinsky (2013) suggest, "[d]espite numerous studies examining the impact of community violence on children and youth, there is a sparse literature examining its influence on teachers" (p. 379). Through 20 open interviews, teachers identified challenges such as lack of training, fears for personal safety, somatic stress symptoms, inadequate school security, and neighborhood violent crime; and they related detrimental coping strategies such as "emotional withdrawal" and "limiting involvement with difficult students."

Thompkins, Chauveron, Harel, and Perkins (2012) suggest that "[m]ore than [two] decades of research have yielded a robust literature on effective approaches to school-based

violence prevention" (p. 435), but limited budgets, political pressures, and time often impede their successful integration. The Leadership Program's universal Violence Prevention Project (VPP) is designed to circumvent these issues, primarily addressing the constraints of incorporating such a program within the timeframe of a high school curriculum. The VPP is composed of "twelve, forty-five minute lessons two evaluation sessions, and two planning sessions with teachers and school principals before implementation" (p. 436). Furthermore, teachers can pick and choose appropriate modules within each of the five components (self-concept, group dynamics, vision and imagination, and conflict management) based on their unique schedule and needs. Thompkins et al.'s evaluation of the VPP concluded that completing the curriculum was associated with "gains in academic self-concept and improvements in some conflict resolution skills, including reductions in levels of verbal aggression" (2012, p. 440), but most notably, 74% of facilitators met all of the program's requirements. Thompkins et al. conclude that these findings suggest "it may be possible to optimize violence prevention programs to meet the needs of typical urban high schools while maintaining effectiveness" (2012, p. 442).

It is worth noting two final observations on the intersection of educational programs and research and CVE. First, there appears to be a substantial gap in the academic literature addressing the prevalence of violent or religious extremism in universities within the temporal parameters of this report. Either this issue has been previously addressed and subsequently dismissed, or it has been neglected in recent years. Second, when the same search queries are entered into a web browser (such as Google), relevant and recent news and magazine articles on CVE in schools do appear—predominately from Australian news outlets. This could indicate that programs to counter violent extremism are currently being designed and integrated into schools; and if so, then evaluation of these programs will be needed. Such programs will be a key topic during stakeholder interviews appearing in the forthcoming report.

7.3.1 Summary of Education

▪ Queries in scholarly databases such as "countering violent extremism in schools/universities," "preventing violence in schools," "preventing violent extremism in schools," and "radicalization in schools/universities," and "programs for countering violent extremism in schools" within the years 2010 to 2016 did not yield a significant amount of relevant articles for CVE research or programs.

▪ Any program designed to counter violence in school must compete for money, political and cultural acceptance, and time.

▪ Future programs should look to The Leadership Program's universal VPP model to implement time-efficient and culturally appropriate curricula.

7.4 Anthropology

Anthropology is a comparative study of the human experience, drawing primarily from observing patterned behaviors referred to as culture. In statements made before the Subcommittee on Emerging Threats and Capabilities, Scott Atran suggests "…I think that one of the great shortfalls in our current approach [to CVE] is that there's really no one out there studying things, in depth, in the field." He continues, "I think we're spending billions of dollars on widgets, and very little on engaging socially sensitive people who know what the dreams and visions of these people are" (2010, p. 33). Bjelopera (2012; citing Henderson, Ortiz, Sugie, & Miller, 2006) suggests three of the main obstacles hindering outreach between U.S. Arabs and law enforcement are "[d]istrust between Arab communities and law enforcement, lack of cultural awareness among law enforcement officers, [and] language barriers…" (p.9). Werbner suggests that anthropology can address these issues of cultural dissidence in CVE efforts through "the study of religious mobilization and social movements, radical religious rhetoric, and ontologies of religious nationalism as they are inflected and moved by mediated global crises" (2010, p. 193). A report commissioned by the United States Army conducted by the RAND Corporation (Thaler, Brown, Gonzales, Mobley, & Roshan, 2013) supports the assertion that social scientists, such as anthropologists, are particularly equipped to improving understanding of unstable environments vulnerable to extreme violence.

Drawing from a range of methodologies, anthropology is particularly suited to make crosscultural and crossdisciplinal comparisons because it:

▪ Provides an evaluation of monitoring tools used in counterterrorism programs (Ellis, Cleary, Innes, & Zeuthen, 2011).

▪ Outlines an interdisciplinary framework to assess youth vulnerabilities for violent extremism across several different cultures (Constanza, 2012).

▪ Offers salient observations on understanding state violence (Juaregui, 2013).

▪ Presents a case for science-based field research (Atran, 2010; 2011).

▪ Provides an anthropological and sociological framework for identifying and analyzing cultural and systemic factors that breed environments vulnerable to insurgency, terrorism, and violent extremism (Thaler, Brown, Gonzalez, Mobley, & Roshan, 2010).

- Provides a quantitative analysis of the Global Terrorism Database and concludes "fatalistic beliefs, rigid gender roles, and greater tightness are related to a greater number of terrorist attacks or fatalities" (Gelfand, LaFree, Fahey, & Feinberg's 2013, p.8).

- Provides a study of the simultaneity of religiosity and violence (Purzycki & Gibson, 2011).

- Presents an ethnographic analysis of leaving an extremist group (Barrelle, 2014).

- Provides a conceptualization of lone-wolf terrorist violence through the lenses of society, culture, and religion (Costa & Kaplan, 2012).

7.4.1 Summary of Anthropology

- Anthropology can offer valuable insights on the cultural and historical motivations of particular violent extremist organizations.

- Anthropologists are particularly equipped to provide scientific, field-based research on violent extremist groups.

8. CONCLUSION

This report has presented an overview of CVE literature from 2010 to 2016 to inform DHS S&T of the state of recent CVE research. This discussion is also an attempt to provide a new theoretical framework for conceptualizing CVE research—a framework that eliminates mutually exclusive pillars of research in favor of a dynamic circle of knowledge and practice. The literature clearly supports the notion that the sum of each research area's individual efforts is encompassed by the term "prevention." Accordingly, this literature review posits a CVE framework where preventing violent extremism is the overarching goal of CVE and the other thematic areas cooperate to achieve this goal.

8.1   Gaps in the Literature

Across the literature, it is clear there is a need for more evaluations of CVE programs and applied CVE research. Romaniuk reflects critically on the discipline as a whole, saying "CVE has been a mixed experience" (2015, p. 39). He continues to suggest, "budgets for CVE are disproportional to [its] newly heightened public profile," but qualifies "[his] report has made the case for better programming, not more of it" (2015, p. 39). One of the many limitations of CVE in general is that it "involves a number of interdisciplinary research areas that have not yet been systematized or combined to a relevant degree" (Ranstorp and Hyllengren 2013, p. 5). However, as Ranstorp and Hyllengren suggest, "[h]andling these issues in the best possible way is a massive undertaking and, for a number of reasons, it is not possible to deal with every aspect of the literature available in the area" (2013, p. 5). Evidenced by this literature review, one of the reasons could be because of CVE-related literature being scattered across numerous disciplines, journals, and government resources. In addition, Schuurman and Eijkman (2013) note that scholars often experience barriers to accessing reliable primary sources, such as government archives and interviews with former members of violent extremist organizations. For these reasons, it is difficult for researchers and policy makers alike to conduct a comprehensive search on certain CVE areas such as radicalization or recruitment, for example. In addition, Schmid suggests, "[w]hile some topics are 'fashionable" and obtain an extraordinary amount of attention (e.g., CBRN threats, radicalization, suicide terrorism, jihadist terrorism) other (sub-) topics are un- or underresearched" (2011, p.76). To this end, there are a number of gaps identified in the literature:

- The lack of longitudinal studies on victims of terrorist attacks (Neria, DiGrande, & Adams, 2011; Watson et al., 2011);

- "A deep lack of field-based scientific research on pathways to and from political and group violence" (Atran, 2010, p. 2; 2011, p.33);

- How globalization and economic development mitigate terrorist attacks and radicalization (Choi, 2015; Zimmermann, 2011; Younas, 2015);

- The need for a decision-based framework that enables security risks to be quantified in a rational and consistent manner (Stewart, 2010; 2011);

- The need for "identifying the correct level of analysis in theoretical language and measurements" (Zimmermann, 2011, p. S152); and

- The need for unbiased decision-making processes (Montibeller & von Winterfeldt, 2015).

A complete research gap analysis informed by stakeholder interviews and focus groups is forthcoming in a separate report, and will consider this literature review in its findings.

References

Adams, L., & Berry, D. (2012). Who will show up? Estimating ability and willingness of essential hospital personnel to report to work in response to a disaster. *The Online Journal of Issues in Nursing, 17*(2).

Adini, B., & Peleg, K. (2013). On constant alert: Lessons to be learned from Israel's emergency response to mass-casualty terrorism incidents. *Health Affairs, 32*(12), 2179-2185.

Akbar, A. (2015). National security's broken windows. *UCLA Law Review*, *62*, 834-907.

Akgun, I., Kandakoglu, A., & Ozok, A. F. (2010). Fuzzy integrated vulnerability analysis assessment model for critical facilities in combating the terrorism. *Expert Systems with Applications*, *37*, 3561–3573.

Al-Bulushi, S. (2014) "Peacekeeping" as occupation: Managing the market for violent labor in Somalia. *Transforming Anthropology*, *22*(1), 31-37.

Aly, A., & Striegher, J. (2012). Examining the role of religion in radicalization to violent extremism. *Studies in Conflict & Terrorism*, *35*, 849-862.

Aly, A. (2014). Walk away from violent extremism: A campaign to address violent extremism online. *Journal EXIT-Deutschland*, *3*, 64-77.

Aly, A., Taylor, E., & Karnovsky, S. (2014). Moral disengagement and building resilience to violent extremism: An education intervention. *Studies in Conflict & Terrorism*, *37*, 369-385.

Aslam, F., & Kang, H. (2015). How different terrorist attacks affect stock markets. *Defence and Peace Economics*, *26*(6), 634-648.

Atran, S. (2010). *Pathways to and from violent extremism: The case for science-based field research*. Washington, DC: ARTIS.

Atran, S. (2011) Hearing before the Subcommittee on Emerging Threats and Capabilities of the Committee on Armed Services. United States Senate. One Hundred Eleventh Congress Second Session. March 10, 2010. Washington: U.S. Government Printing Office.

Aziz, S. F. (2011a). Caught in a preventive dragnet: Selective counterterrorism in a Post 9/11 America. *Gonzaga Law Review, 47,* 429.

Aziz, S. F. (2011b). Countering religion or terrorism: Selective enforcement of material support laws against Muslim charities. Retrieved from http://works.bepress.com/sahar_aziz/14/.

Aziz, S. F. (2012). From the oppressed to the terrorist: Muslim-American women in the crosshairs of intersectionality. *Hastings Race and Poverty Law Journal, 9,* 191.

Barrelle, K. (2011). *From terrorist to citizen*. Victoria, Australia: Monash University.

Bartlett, J., & Miller, C. (2012). The edge of violence: Towards telling the difference between violent and non-violent radicalization. *Terrorism and Political Violence*, *24*, 1-21.

Bergin, A., Clifford, M., Connery, D., Feakin, T., Gleiman, K., Huang, S., … & Yasmeen, S. (2015) Gen Y jihadists: Preventing radicalisation in Australia. Barton, Australia: Australian Strategic Policy Institute.

Beutel, A. J. (2010). *Building bridges to strengthen America: Forging an effective counterterrorism enterprise between Muslim American & law enforcement.* Muslim Public Affairs Council.

Bigo, D., Bonelli, L., Guittet, E., & Ragazzi, F. (2014). Preventing and countering youth radicalisation in the EU: Study for the LIBE Committee. Brussels: European Parliament Directorate-General for Internal Policies.

Bjelopera, J. P. (2012) Countering Violent Extremism in the United States. Congressional Research Service.

Borum, R. (2014). Psychological vulnerabilities and propensities for involvement in violent extremism. *Behavioral Sciences and the Law*, *32*, 286-305.

Braga, A. A., & Weisburd, D. L. (2012). The effects of 'pulling levers:' Focused deterrence strategies on crime. *Campbell Systematic Reviews*, 6.

Brennan, M., Dolan, P., Rafiq, H., Connolly-Ahern, C., Jolly, R., & Eissler, S. (2015). Youth led pathways from extremism. UNESCO.

Briggs, R., & Feve, S. (2013). Review of programs to counter narratives of violent extremism: What works and what are the implications for government? Institute for Strategic Dialogue.

Carter, D. B. (2015). When terrorism is evidence of state success: Securing the state against territorial groups. *Oxford Economic Papers*, *67*(1), 116-132.

Carter, J. G., Phillips, S. W., & Gayadeen, S. M. (2014). Implementing intelligence-led policing: An application of loose-coupling theory. *Journal of Criminal Justice*, *42*, 433–442.

Cerván, D. (2010). Armed violence reduction and prevention: A promising contribution to the solution for the Nigerian ethno-religious conflict. *The International Journal of Interdisciplinary Social Sciences, 5*(3), 225-236.

Choi, S. (2015). Economic growth and terrorism: Domestic, international, and suicide. *Oxford Economic Papers*, *67*(1), 157–181.

Christmann, K. (2012). Preventing religious radicalisation and violent extremism: A systematic review of the research evidence. Youth Justice Board.

Coker, A. L., Cook-Craig, P. G., Williams, C. M., Fisher, B. S., Clear, E. R., Garcia, L. S., & Hegge, L. M. (2011) Evaluation of green dot: An active bystander intervention to reduce sexual violence on college campuses. *Violence Against Women*, *17*(6), 777-796.

Constanza, W. A. (2012). An interdisciplinary framework to assess the radicalization of youth towards violent extremism across cultures (Doctoral dissertation). Washington, DC: Georgetown University.

Coolsaet, R. (2010). EU counterterrorism strategy: Value added or chimera? *International Affairs*, *86*(4), 857-873.

Coren, E., Hossain, R., Pardo, J. P., Veras, M., Chakraborty, K., Harris, H., & Martin, A. J. (2013). Interventions for promoting reintegration and reducing harmful behaviour and lifestyles in street-connected children and young people: A systematic review. *Campbell Systematic Reviews*, 6.

Costa, C. P., & Kaplan, J. (2012). On tribalism: Auxiliaries, affiliates, and aspirational political violence. In Astornio-Courtois, A., Cabayan, H., Casebeer, B., Capman, A., DiEuliis, D., Ehlschlaeger, C., … & Rice, C. (eds.). *National security challenges: Insights from social, neurobiological, and complexity sciences*. 127-153.

Dalgaard-Nielsen, A. (2013). Promoting exit from violent extremism: Themes and approaches. *Studies in Conflict & Terrorism*, *36*, 99-115.

Dawson, L., Edwards, C., & Jeffray, C. (2014). Learning and adapting: The use of monitoring and evaluation in countering violent extremism. London, UK: Royal United Services Institute for Defence and Security Studies.

Dillion, R. L., Tinsley, C. H., & Burns, W. J. (2014). Near-misses and future disaster preparedness. *Risk Analysis, 34*(10), 1907-1922.

Ebensen, F., Osgood, D. W., Peterson, D., Taylor, T. J., & Carson, D. C. (2013). Short- and long-term outcome results from a multisite evaluation of the G.R.E.A.T. program. *Criminology and Public Policy*, *12*(3), 375-411.

Eisenberg, N., & Silver, R. C. (2011). Growing up in the shadow of terrorism: Youth in America after 9/11. *American Psychologist*, *66*(6), 468-481.

Eisenman, D., Chandra, A., Fogleman, S., Magana, A., Hendricks, A., Wells, K., … & Plough, A. (2014). The Los Angeles County community disaster resilience project — A community-level, public health initiative to build community disaster resilience. *International Journal of Environmental Research and Public Health*, *11*(8), 8475-8490.

Eliot, M., Cornell, D., Gregory, A., & Fan, X. (2010). Supportive school climate and student willingness to seek help for bullying and threats of violence. *Journal of School Psychology, 48*, 533-553.

Ellis, A., Cleary, A., Innes, M., & Zeuthen, M. (2011). Monitoring and evaluation tools for counterterrorism program effectiveness. Washington, DC: Center of Global Counterterrorism Cooperation.

Fenstermacher, L. (ed.). (2015). Countering violent extremism: Scientific methods and strategies. Topical Strategic Multi-Layer Assessment And Air Force Research Laboratory Multi-Disciplinary White Paper In Support Of Counter-Terrorism And Counter-Wmd.

Fink, N., Romaniuk, P., & Barakat, R. (2013). *Evaluating countering violent extremism programming: Practice and progress*. New York, NY: Center on Global Terrorism Cooperation.

Fischbacher-Smith, D. (2010). Beyond the worst case scenario: 'Managing' the risks of extreme events. *Risk Management*, *12*(1), 1-8.

Fischbacher-Smith, D. (2011). (Re)framing elements of risk? *Risk Management*, *13*(1/2), 1-15.

Fischbacher-Smith, D., & Fischbacher-Smith, M. (2013). The vulnerability of public spaces: Challenges for UK hospitals under the 'new' terrorist threat. *Public Management Review*, *15*(3), 330–343.

Freese, R. (2014). Evidence-based counterterrorism or flying blind? How to understand and achieve what works. *Perspectives on Terrorism, 8*(*1*), 37-56.

Gelfand, M.J., LaFree, G., Fahey, S., & Feinberg, E. (2013). Cultural factors in extremism. *Journal of Social Issues*, *69*(3), 495-517.

Ginges, J., Atran, S., Sachdeva, S., & Medin, D. (2011). Psychology out of the laboratory: The challenge of violent extremism. *American Psychologist*, *66*(6), 507-519.

Gorman-Smith, D., Kampfner, A., & Broman, K. (2013). What should be done in the family to prevent gang membership? In T. R. Simon, N. M. Ritter, & R. R. Mahendra (Eds.). *Changing course: Preventing gang membership*. (pp. 74-88). U.S. Department of Justice & U.S. Department of Health and Human Services.

Greenwood, P. (2010). Preventing and reducing youth crime and violence: Using evidence-based practices. California: Governor's Office of Gang and Youth Violence Policy.

Haider, H. (2015). *Radicalisation of diaspora communities*. Birmingham, UK: GSDRC, University of Birmingham.

Hegghammer, T. (2013). Should I stay or should I go? Explaining variation in western jihadists' choice between domestic and foreign fighting. *American Political Science Review*, *107*(1), 1-15.

Henderson, N.J., Ortiz, C.W., Sugie, N.F., & Miller, J. (2006). Law enforcement and Arab American community relations after September 11, 2001: Engagement in a time of uncertainty. New York, NY: Vera Institute of Justice.

Hennigan, K. M., Maxson, C. L., Sloane, D. C., Kolnick, K. A., & Vindel, F. (2014). Identifying high-risk youth for secondary gang prevention. *Journal of Crime and Justice*, *37*(1), 104-128.

Higginson, A., Benier, K., Shenderovich, Y., Bedford, L., Mazerolle, L., & Murray, J. (2015). Preventive interventions to reduce youth involvement in gangs and gang crime in low- and middle-income countries: A systematic review. *Campbell Systematic Reviews*, 18.

Hildenbrand, A. K., Daly, B. P., Nichols, E., Brooks-Holliday, S., & Kloss, J. D. (2013) Increased risk for school violence-related behaviors among adolescents with insufficient sleep. *Journal of School Health, 83*(6). 408-414.

Holman, E. A., Garfinb, D. R., & Silver, R. C. (2013). Media's role in broadcasting acute stress following the Boston Marathon bombings. *Proceedings of the National Academy of Sciences of the United States of America*, *111*(1), 93-98.

Horgan, J., & Braddock, K. (2010). Rehabilitating the terrorists? Challenges in assessing the effectiveness of de-radicalization programs. *Terrorism and Political Violence, 22*, 267-291.

Horgan, J., & Braddock, K. (2015). Evaluating the effectiveness of de-radicalization programs: towards a scientific approach to terrorism risk reduction (pp.154-159). In Fenstermacher, L. (ed.). (2015). *Countering violent extremism: Scientific methods and strategies.* Topical Strategic Multi-Layer Assessment And Air Force Research Laboratory Multi-Disciplinary White Paper In Support Of Counter-Terrorism And Counter-Wmd.

Horgan, J. (2014) What makes a terrorist stop being a terrorist? *Journal for Deradicalization 1*, 1-4.

Howell, J. C. (2010). Gang prevention: An overview of research and programs. *Juvenile Justice Bulletin*. Retrieved from https://www.ncjrs.gov/pdffiles1/ojjdp/231116.pdf.

Hughes, G. (2014). Skyjackers, jackals, and soldiers: British planning for international terrorist incidents during the 1970s. *International Affairs*, *90*(5), 1013-1031.

Institute for Strategic Dialogue. (2010). Comparative evaluation framework for counterradicalization. London, UK: Institute for Strategic Dialogue.

Jauregui, B. (2013). Dirty anthropology: Epistemologies of violence and ethical entanglements in police ethnography. In W. Garriot (ed.), *Policing and contemporary governance: The anthropology of police in practice*. Palgrave Macmillan US, 125-153.

Jenkins, B. M. (2010) Would be warriors: Incidents of jihadist terrorist radicalization in the united states since September 11, 2001. Santa Monica, CA: The RAND Corporation, 2010.

Johnson, S. L., Burke, J. G., & Gielen, A. C. (2011). Prioritizing the School Environment in School Violence Prevention Efforts. *Journal of School Health, 81*(6), 331-340.

Kaplan, E. H. (2015) Socially efficient detection of terror plots. *Oxford Economic Papers*, *67*(1), 104-115.

Köhler, D. (2013). Family counselling as prevention and intervention tool against 'foreign fighters': The German 'Hayat' program. *Journal EXIT-Deutschland*, *3*, 182-204.

Köhler, D. (2014). Right-wing extremist radicalization processes: The formers' perspective. *Journal EXIT-Deutschland*, *1*, 307-377.

Konold, T., & Cornell, D. (2015). Multilevel, multitrait—multimethod latent analysis of structurally different and interchangeable raters of school climate. *Psychological Assessmen*t, *24*(3), 1097-1109.

Krieger, T., & Meierrieks, D., 2009. Armut, Ungleichheit, wirtschaftliche Schwäche? Empirische Evidenz und methodische Herausforderungen zum Zusammenhang von Ökonomie und Terrorismus. Vierteljahrshefte zur Wirtschaftsforschung 78, 29–40.

Krieger, T., & Meierrieks, D. (2011). What causes terrorism? *Public Choice*, *147*, 3–27.

Kruglanski, A. W., Gelfand, M. J., Belanger, J. J., Sheveland, A., Hetiarachchi, M., & Gunaratna, R. (2014). The psychology of radicalization and deradicalization: How significance quest impacts violent extremism. *Advances in Political Psychology*, *35*(1), 69-93.

Landeszentrale für politische Bildung Baden-Württemberg. (n.d.). Retrieved from http://www.team-mex.de/.

Lee, J., Evans, J., & Foley, J. (2015). *Final report: The 5RD workshop to counter violent extremism*. Research Triangle Park, NC: RTI International.

Leonard, H. B., Cole, C. M., Howitt, A. M., Heymann, P. B. (2014). Why was Boston strong? Lessons from the Boston Marathon bombing. Cambridge, MA: Harvard Kennedy School Program on Crisis Leadership.

Lum, C., Kennedy, L. W., & Sherley, A. (2008). Is counter-terrorism policy evidence-based? What works, what harms, and what is unknown. *Psicothema*, *20*(1), 35-42.

Mazhar, U. & Rizvi U.F. (2015) Killing the Savior: Understanding Terrorism Against Health Professionals in Pakistan. Shahid Javed Burki Institute of Public Policy at NetSol.

Maring, E. F., & Koblinsky, S. A. (2013). Teachers' challenges, strategies, and support needs in schools affected by community violence: A qualitative study. *Journal of School Health, 83*, 379-388.

Markiewicz, M., Bevc, C. A., Hegle, J., Horney, J. A., Davies, M., & MacDonald P. D. M. (2012). Linking public health agencies and hospitals for improved emergency preparedness: North Carolina's public health epidemiologist program. *BMC Public Health*, *12*(141), 1-7.

Mayhorn, C. B., Yim, M., & Orrock, J. A. (2006). Warnings and hazard communications for natural and technological disasters. In Wogalter, M. (Ed.), *Handbook of warnings* (pp.763–769). Mahwah, NJ: Erlbaum.

McCants, W., & Watts, C. (2012). U.S. strategy for countering violent extremism: An assessment. Philadelphia, PA: Foreign Policy Research Institute.

Mehta, S., Cornell, D., Fan, X., & Gregory, A. (2013). Bullying climate and school engagement in ninth grade students. *Journal of School Health*, *83*, 45-52.

Menkhaus, K. (2014). Al-Shabaab and social media: A double edged sword. *Brown Journal of World Affairs*, *20*(2), 309-327.

Mirahmadi, H. & Farooq, M. (2010) A community based approach to countering Radicalization: A partnership for America. World Organization for Resource Development and Education, December 2010.

Mirahmadi, H., Ziad, W., Farooq, M., & Lamb, R. (2016). Empowering Pakistan's civil society to counter violent extremism. *Contemporary Readings in Law and Social Justice*, *8*(1), 188-214.

Montibeller, G., & von Winterfeldt, D. (2015). Cognitive and motivational biases in decision and risk analysis. *Risk Analysis*, *35*(7), 1230-1251.

Moscardino, U., Scrimin, S., Capello, F., & Altoè, G. (2014). Brief report: Self-blame and PTSD symptoms in adolescents exposed to terrorism: Is school connectedness a mediator? *Journal of Adolescence 37*, 47-52.

Mueller, J., 2006. Overblown: How politicians and the terrorism industry inflate national security threats, and why we believe them. New York: Free Press.

Mulcahy, E., Merrington, S., & Bell, P. (2013). The radicalisation of prison inmates: Exploring recruitment, religion and prisoner vulnerability. *Journal of Human Security*, *9*(1), 4-14.

Murphy, J. J., & Ellson, J. P. (2010). Responding to target buildings in a terrorist attack: Are your crews prepared? *Fire Engineering*, *163*(9), 20-26.

Muslim Public Affairs Council. (2014). *Safe spaces initiative: Tools for developing healthy communities*. Muslim Public Affairs Council.

Naqvi, H. A., Kazim, S. F., & Huma, S. (2010). Terrorism and health: The responsibility of intellectuals. *Journal of the Pakistan Medical Association*, *60*(5), 403-405.

Nashat, B. (2013). *Conference handout: CVE through communications seminar: Monitoring and evaluation techniques for CVE communication programs*. Hedayah. Retrieved from http://www.hedayah.ae/pdf/cscc-seminar-handout.pdf.

Neria, Y., DiGrande, L., & Adams, B. G. (2011). PTSD following the September 11, 2001, terrorist attacks: A review of the literature among highly exposed populations. *American Psychologist*, *66*(6), 429-446.

Neumann, P. (2011). *Preventing violent radicalization in America*. Washington, DC: Bipartisan Policy Center.

Nickerson, R. S. (2011). Roles of human factors and ergonomics in meeting the challenge of terrorism. *American Psychologist*, *66*(6), 555-566.

Office of Community Oriented Policing Services. (2014). Community Policing Defined. Washington, DC: Office of Community Oriented Policing Services, U.S. Department of Justice. Retrieved from http://ric-zai-inc.com/Publications/cops-p157-pub.pdf.

Office of the Coordinator of Counterterrorism: Testimony before the Emerging Threats and Capabilities Subcommittee of the Senate Armed Services Committee (2010) (Testimony of Daniel Benjamin).

Özerdem, A., & Podder, S. (2011). Disarming youth combatants: Mitigating youth radicalization and violent extremism. *Journal of Strategic Security*, *4*(4), 63-80.

Pels, T., & de Ruyter, D. J. (2012). The influence of education and socialization on radicalization: An exploration of theoretical presumptions and empirical research. *Child Youth Care Forum*, *41*, 311-325.

Phillips, C., Tse, D., & Johnson, F. (2011). Community cohesion and PREVENT: How have schools responded? Manchester, UK: Department for Education.

President's Task Force on 21st Century Policing. (2015). Final Report of the President's Task Force on 21st Century Policing. Washington, DC: Office of Community Oriented Policing Services.

Public Safety Canada. (2014). 2014 public report on the terrorist threat to Canada: Feature focus 2014: Responding to violent extremism and travel abroad for terrorism-related purposes. Public Safety Canada.

Purzycki, B. G., & Gibson, K. (2011). Religion and violence: An anthropological study on religious belief and violent behavior. *Skeptic Magazine*, *12*(2), 22-27.

Rabasa, A., Pettyjohn, S. L., Ghez, J. J., & Boucek, C. (2010). Deradicalizing Islamist Extremists. Santa Monica, CA: The Rand Corporation.

Ranstorp, M., & Hyllengren, P. (2013). Prevention of violent extremism in third countries: Measures to prevent individuals joining armed extremist groups in conflict zones. Vallingby, Sweden: Center for Asymmetric Threat Studies, Swedish National Defence College.

Rascoff, S. J. (2012) Establishing official Islam? The law and strategy of counter-radicalization. *Stanford Law Review, 64*(1), 125-190.

Roman, C. G., Cahill, M., Lachman, P., Lowry, S., Orosco, C., McCarthy, C., … & Pedroza, J. (2012). Social networks, delinquency, and gang membership: Using a neighborhood framework to examine the influence of network composition and structure in a Latino community. Washington, DC: The Urban Institute.

Romaniuk, P., & Fink, N. C. (2012). From input to impact: Evaluating terrorism prevention programs. Center on Global Terrorism Cooperation.

Romaniuk, P. (2015) Does CVE Work? Lessons Learned from the Global Effort to Counter Violent Extremism. Global Center on Cooperative Security, September 2015.

Schmid, A. (2011). 50 un- and under-researched topics in the field of (counter-) terrorism studies. *Perspectives on Terrorism*, *5*(1), 76-78.

Schmid, A. P. (2013). *Radicalisation, de-radicalisation, counter-radicalisation: A conceptual discussion and literature review*. The Hague: International Centre for Counter-Terrorism.

Schneier, F. R., Neria, Y., Pavlicova, M., Hembree, E., Suh, E. J., Amsel, L., & Marshall, R. D. (2012). Combined prolonged exposure therapy and paroxetine for PTSD related to the World Trade Center attack: A randomized controlled trial. *American Journal of Psychiatry*, 169(1), 80-88.

Schneider, F., Brück, T., & Meierrieks, D. (2015). The economics of counterterrorism: A survey. *Journal of Economic Surveys*, *29*(1), 131–157.

Schuurman, B., & Eijkman, Q. (2013). *Moving terrorism research forward: The crucial role of primary sources*. The Hague: International Centre for Counter-Terrorism.

Sheikh, S., Sarwar, S., & Reed, C. (2010). Teaching methods that help to build resilience to extremism rapid evidence assessment. Department for Education.

Sherrieb, K., Louis, C. A., Pfefferbaum, R. L., Pfefferbaum, B., Diab, E., & Norris, F. H. (2012). Assessing community resilience on the US coast using school principals as key informants. *International Journal of Disaster Risk Reduction*, *2*, 6-15.

Silver, R., & Fishhoff, B. (2011). What should we expect after the next attack? American Psychologist, 66(6), 567-572.

Smith, A. (2015). Telling stories: Preventing violent extremism through community engagement. *The Police Chief*, *82*, 40-41.

Soufan, A., Fallon, M., Freedman, D., Borum, R., Horgan, J., Gelles, M., … & McManus, B. (2010). Risk Reduction for Violent Extremism. Dohar, Qatar: Qatar International Academy for Security Studies.

Spalek, B., & Davies, L. (2012). Mentoring in relation to violent extremism: A study of role, purpose, and outcomes. *Studies in Conflict & Terrorism*, *35*(5), 14-21.

Stevens, G., Agho, K., Taylor, M., Jones, A. L., Barr, M., & Raphael, B. (2012). Perceived coping and concern predict terrorism preparedness in Australia. *BMC Public Health*, *12*(1117), 1-11.

Stewart, M. G. (2008). Cost effectiveness of risk mitigation strategies for protection of buildings against terrorist attack. *Journal of Performance of Constructed Facilities*, *22*(2), 115-120.

Stewart, M. G. (2010). Risk-informed decision support for assessing the costs and benefits of counter-terrorism protective measures for infrastructure. *International Journal of Critical Infrastructure Protection*, *3*, 29-40.

Stewart, M. G. (2011). Life-safety risks and optimisation of protective measures against terrorist threats to infrastructure. *Structure and Infrastructure Engineering*, *7*(6), 431–440.

Thaler, D. E., Brown, R. A., Gonzalez, G. C., Mobley, B. W., & Roshan, P. (2010). *Improving the U.S. military's understanding of unstable environments vulnerable to violent extremist groups: Insights from social science*. Santa Monica, CA: The Rand Corporation.

Thaler, D. E., Brown, R. A., Gonzalez, G.C., Mobley, B.W., & Roshan, P. (2013). Improving the U.S. military's understanding of unstable environments vulnerable to violent extremist groups: Insights from social science. Santa Monica, CA: The Rand Corporation.

The Netherlands Ministry of Security and Justice (2010). Counterterrorism Measures in the Netherlands in the First Decade of the 21st Century. Netherlands Ministry of Security and Justice.

Thompkins, A. C., Chauveron, L. M., Harel, O., & Perkins, D. F. (2012). Optimizing violence prevention programs: An examination of program effectiveness among urban high school students. *Journal of School Health, 82*(2), 435-443.

Tolan, P., Henry, D., Schoeny, M., Bass, A., Lovegrove, P., & Nichols, E. (2013). Mentoring interventions to affect juvenile delinquency and associated problems: A systematic review. *Campbell Systematic Reviews*, 10.

Van der Laan, P., Smit, M., Busschers, I., & Aarten, P. (2011). Cross-border trafficking in human beings: Prevention and intervention strategies for reducing sexual exploitation. *Campbell Systematic Reviews*, 9.

van Hemert, D., van den Berg, H., van Vliet, T., Roelofs, M., Huis in 't Veld, M., Marret, J. L., … & Feddes, A. (2014). *Synthesis report on the state-of-the-art in evaluating the effectiveness of counter-violent extremism interventions*. Cambridge, UK: IMPACT Europe.

Vidino, L. (2010). *Countering radicalization in America: Lessons from Europe*. Washington, DC: United States Institute of Peace.

Watson, P. J., Brymer, M. J., & Bonanno, G. A. (2011). Postdisaster psychological intervention since 9/11. *American Psychologist*, *6*(6), 482-494.

Weine, S., Polutnik, C., & Younis, A. (2015). *The role of community policing in countering violent extremism*. College Park, MD: The National Consortium for the Study of Terrorism and Responses to Terrorism.

Werbner, P. (2010). Notes from a small place: Anthropological blues in the face of global terror. *Current Anthropology*, *51*(2), 193–221.

Williams, M., & Kleinman, K. (2013). A utilization-focused guide for conducting terrorism risk reduction program evaluations. *Behavioral Sciences of Terrorism and Political Aggression*, *6*(2), 102-146.

Xiang, Y., & Zhuang, J. (2014). A medical resource allocation model for serving emergency victims with deteriorating health conditions. *Annals of Operations Research*, *236*(1), 177-196.

Younas, J. (2015). Does globalization mitigate the adverse effects of terrorism on growth? *Oxford Economic Papers*, *67*(1), 133-156.

Zeiger, S., & Aly, A. (2015). Introduction: the need for research in CVE policy and practice. In S. Zeiger & A. Aly (eds.). *Countering Violent Extremism: Developing an evidence-base for policy and practice.* Perth: Curtin University, 1-12.

Zimmermann, E. (2011). Globalization and terrorism. *European Journal of Political Economy*, *27*(S1), S152–S161.