

From Columbine to Palestine:
A comparative analysis of rampage shooters in the United States
and volunteer suicide bombers in the Middle East

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Abstract

Previous research comparing rampage shooters in the U.S. and volunteer suicide bombers in the Middle East appears to be virtually non-existent. When these two types of suicidal killers have been mentioned in the same context, it has primarily been to dismiss any possible connections. Rampage shooters are generally assumed to be mentally unbalanced, while suicide bombers are seen as extreme, but rational, political actors. However, this review explores the possibility that the primary differences between the two types of killers are cultural, not individual, and that in terms of their underlying psychology and motivation, they are actually quite similar. In both cases, substantial evidence indicates that these perpetrators of murder–suicide share many of the following characteristics: (1) they had troubled childhoods, (2) they lived in oppressive social environments, (3) they suffered from low self-esteem, (4) they were triggered by a personal crisis, (5) they were seeking revenge, and (6) they were seeking fame and glory.

Keywords: Rampage shooters; Suicide bombers; School shooters; Terrorism; Murder–suicide

1. Introduction

In recent years, there has been a significant amount of media attention and scholarly research on the topic of suicide terrorism (Crenshaw, 2007, Gambetta, 2005, Hafez, 2006, Kruglanski et al., 2009, Pape, 2005, Pedahzur, 2005, Post et al., 2009). Although suicide attacks have been prominent in parts of Asia and the Middle East for decades (Andoni, 1997, LoCicero and Sinclair, 2008, Moghadam, 2008, Piven, 2007, Whitehead and Abufarha, 2008), it was the 19 hijackers on 9/11 who not only took the lives of thousands of innocent civilians, but also their own lives, that triggered the flood of Western interest on this topic. At least initially, the Western world seemed perplexed by the fact that there are indeed many individuals around the world who celebrate suicide attacks, death, and obliteration (Berko & Erez, 2005).

However, the United States does not need to look as far as the Middle East to find savage acts of murder–suicide. The attacks by rampage shooters in the U.S. have proven to be just as confounding as the strikes carried out by suicide terrorists. Such acts have been relatively rare until the past few decades. However, the 1999 Columbine high school attack, the 2007 Omaha mall shootings, the 2007 Virginia Tech massacre and the 2009 Pennsylvania gym

shootings have made these rampage shooters a national issue (CNN, 2007, December 6, CNN, 2009, August 5, Cullen, 2009, Hausner, 2007, April 17, Langman, 2009, O'Toole, 2000). And just like suicide bombers, these individuals often choose to take not only the lives of others, but also their own (Langman, 2009). In the cases where they do not actually die by their own hand, many rampage shooters have clearly planned on "suicide by cop" (Carey, 2007).

Nowhere are the apparent similarities between suicide terrorists and rampage shooters more evident than in the recent case of Major Nidal Hasan. Although he miraculously survived his attack, which left 13 people dead and 31 more wounded, Hasan intended to be killed as well (Ross et al., 2009). In the aftermath of Hasan's deadly assault on the Fort Hood army base in Texas, there has been a major public debate about how the crime should be classified (Lapidos, 2009). Does it constitute a terrorist attack, or was it simply a terrible act of mass murder? Given that there are over one hundred different definitions of terrorism around the world (Hoffman, 2006), it seems likely that the classification of the Fort Hood attack will always depend upon which definition of terrorism is used. However, the labeling debate is far less significant than another question raised by Hasan's unusual limbo status. Is the reason it seems so easy to classify Hasan as both a rampage shooter and an attempted suicide terrorist because the differences between these two types of killers are actually quite small?

In some cases, it seems almost inconceivable to chalk up the similarities between suicide terrorists and suicidal rampage shooters to mere coincidence. For instance, past rampage shooters have referred to themselves as "martyrs," the same self-glorifying term used by suicide bombers (James, 2009, April 16, Larkin, 2009). In addition, suicide bombers commonly target public busses, and a week before George Sodini went on a murder-suicide rampage at a Pittsburgh gym, he brought a grenade on a public bus (Mandak, 2009). In turn, when Sebastian Bosse was found after shooting five people at his high school and then killing himself, he had explosive devices strapped to his body (CTV News, 2006). And in perhaps the most deadly scenario, Columbine shooters Eric Harris and Dylan Klebold killed themselves and others with guns, but they had also planted numerous bombs, which were intended to blow up the cafeteria and could have killed more than 200 students (Gibbs & Roche, 1999). It was only after these bombs failed to explode that they began shooting. Furthermore, the comparisons to suicide terrorists are even more self-evident when we consider another one of Harris's plans. As he wrote in a journal three years before 9/11, he and Klebold would like to "hijack a hell of a lot of bombs and crash a plane into NYC with us inside" (CNN, 2001).

On the other hand, one significant difference between suicide terrorists and rampage shooters may be the role of organizations: suicide terrorists usually work with them, while rampage shooters almost always act on their own. However, previous research indicates that suicide terrorists come in two primary types: those who are fully committed members of an organization when they are called upon to strike, and those who specifically volunteer or are specifically recruited to carry out a suicide attack (Pedahzur, 2005). This latter type consists of individuals whose primary interaction with the group comes after they have decided that they are ready to die, at which point the organization provides brief training and the explosive device. Thus, because these volunteer suicide bombers largely decide to act on their own, they are the ones who appear most similar to rampage shooters.

Previous scholarly research comparing suicide terrorists and rampage shooters seems to be virtually non-existent. When these two types of killers have been discussed in the same

context, it has primarily been to emphasize the apparent differences and quickly dismiss any possible connections (Carey, 2007). For instance, rampage shooters are generally assumed to be mentally unbalanced, while suicide bombers are usually seen as extreme, but rational, political actors (Carey, 2007). One exception is the observation by Omer and Kremer (2003) that the Columbine killers may have been motivated by a general strain of violent fundamentalism similar to that which inspired the 9/11 hijackers.

However, two independent bodies of literature on these types of killers have developed which provide excellent insight into what drives them (Gambetta, 2005, Hafez, 2006, Langman, 2009, Larkin, 2009, Newman et al., 2004, O'Toole, 2000, Pape, 2005, Pedahzur, 2005). For both types of perpetrators, the primary sources of data are retroactive psychological autopsies, compiled from witness statements, family interviews, journals, diaries, suicide notes, and other biographical information, but other types of empirical analyses have been conducted as well. Based on this existing evidence, this review will explore the possibility that the primary differences between volunteer suicide bombers in the Islamic world and rampage shooters in the U.S. appear at the cultural level, not the individual one, and may thus be more instrumental in shaping the form of their violence than in causing the violence itself. Next, this review will present preliminary evidence that in terms of their underlying psychology and motivation, these volunteer suicide bombers and rampage shooters appear to be quite similar. For both, past research indicates that many of the individuals who end up killing others and then dying as a result of their violence share many of the following characteristics: (1) they had troubled childhoods, (2) they lived in oppressive social environments, (3) they suffered from low self-esteem, (4) they were triggered by a personal crisis, (5) they were seeking revenge, and (6) they were seeking fame and glory.

2. Differences

The conventional wisdom has been that, in terms of their psychology and underlying motivations, volunteer suicide bombers and rampage shooters are almost completely different (Carey, 2007). Indeed, even the suggestion that these two types of killers are similar has rarely been made. Therefore, when performing this comparative analysis, it is not worth generating a long list of all conceivable differences in their lives. It makes much more sense to be precise and focus on the specific differences which appear to influence their respective types of murder-suicide.

2.1. Community approval

One of the biggest differences between volunteer suicide bombers in the Middle East and rampage shooters in the U.S. is that suicide terrorism is often approved of in its perpetrators' communities, while rampage shooting is universally condemned. In fact, previous research indicates that for an act of violence to flourish as much as suicide terrorism has in recent years, it needs this approval and support from the community (Berko and Erez, 2005, Hafez, 2006, Pape, 2003, Shay, 2004). As Pedahzur (2005) rightly emphasizes, these attacks require "that the community has to view suicide terrorism as a positive phenomenon" (pp. 150–151). In 2007, Pew Research Center surveys showed that in many Middle Eastern,

Asian, and African societies, a significant percentage of Muslims believed that suicide attacks against civilian targets were justified in order to defend Islam. It is important to emphasize that these were the opinions of many ordinary members of the community—not just radicals, extremists, and terrorists (Pew Research Center, 2007). Furthermore, these communities often speak of suicide attacks in a way that encourages them: since suicide is forbidden by the religion of Islam, these attacks are instead labeled as acts of “martyrdom” (Hasso, 2005). In some Middle Eastern communities—especially areas of Palestine—suicide bombers are extolled as heroes who bring honor to themselves and their families (Berko & Erez, 2005). It is this perception of community approval that diminishes an individual's resistance to carrying out a suicide attack and makes the decision to do so significantly more appealing.

By contrast, rampage shooters in the United States do not enjoy such support and approval from their communities. Generally, in Western societies like the U.S., individuals who take both their own lives and the lives of others are considered “weak, disturbed, and crazy” (Charny, 2007, p. 56). In addition, rampage shooters are often labeled cowards or monsters (Bowden, 2009, June 14, Thompson and Kyle, 2005). Unlike the honored actions of suicide bombers, rampage shooters' attacks bring horror, shock, and fear to their communities (O'Toole, 2000).

The impact of cultural and community approval on these forms of murder–suicide fits within the broader context of differential association theory, which suggests that individuals learn the values, attitudes, rationalizations, and techniques for criminal behavior from those around them (Sutherland, 1947). These communal lessons appear to not only affect the likelihood of an attack, but also the specific attack method in which the violence manifests. This difference between volunteer suicide bombers and rampage shooters seems to be extraordinarily important. It is probably one major reason why suicide bombings have been so common in recent years, while suicidal rampage shootings have remained relatively rare. If we imagine that the community approval of these acts of murder–suicide was simply reversed, perhaps we would see the opposite. If many community leaders, religious leaders, friends and family members in the U.S. supported rampage shootings and praised them as heroic, it seems quite likely that they would be occurring with much more frequency. And if the communities from which suicide bombers arise were unified in their condemnation of such attacks as cowardly, monstrous, and tragic, they would probably occur less often. As Charny (2007) explains, one of the major reasons for the continued stream of new volunteers for suicide bombing attacks is “their being welcomed, honored, supported, or even ‘understood’ by too many peoples, nations, and religions” (p. 149).

2.2. Eternal bliss as a reward for violence

Another key difference between volunteer suicide bombers and rampage shooters is the role of religious influences: suicide bombers believe they will receive heavenly rewards for their violent acts, while most rampage shooters appear to lack a religious motive. Again, in line with differential association theory (Sutherland, 1947), those who volunteer for suicide attacks are inspired because they have learned that they will achieve eternal bliss as a reward for their violence (Berko and Erez, 2005, Charny, 2007, Moghadam, 2008, Whitehead and Abufarha, 2008). These perpetrators believe that suicide bombings are a form of jihad or holy war, carried

out in the name of God. They expect their violent act of sacrifice to be their vehicle for entering the Garden of Eden. Muslim suicide bombers consider the rewards in the afterlife—such as virgins, rivers of alcohol, and an eternity in paradise—more appealing than living, and claim they simply cannot bear waiting for them (Berko & Erez, 2005). This notion can be understood through the statement of a failed suicide bomber, who explained that “Life in the Garden of Eden is more than life in this reality. We do not live real life. We are just by-passers. The real life is in the Garden of Eden. Everything is there. Everything! All what we think about is in the Garden of Eden” (Berko & Erez, 2005, p. 611). Another failed suicide bomber who was only a teenager and in high school when he was caught made a similar statement: “I would have sold my parents and the whole world for the Garden of Eden” (Berko & Erez, 2005, p. 613).

On the other hand, rampage shooters in the U.S. are generally not attempting to achieve instant eternal bliss and gain entry to paradise. More broadly, there does not seem to be any evidence that religion is a common motivating factor for violence among this group of individuals. If anything, rampage shooters have historically seemed more likely to reject the lessons offered by religious groups and religious education, rather than believe in religious rewards for their actions (Larkin, 2009). Although extreme acts of religious violence—such as the bombing of abortion clinics—do occur within the U.S., as of yet, this has not appeared to be a major reason for rampage shootings. In fact, within the U.S., there is evidence that participation in religious activities—such as attending church or other types of religious or spiritual services—may actually reduce rates of criminality and suicidality (Windham, Hooper, & Hudson, 2005).

2.3. Financial assistance as a reward for violence

Along these same lines, at least in some cases, volunteer suicide bombers appear to be motivated by financial rewards (Pedahzur, 2005). It seems unlikely that this is the primary reason for their radical behavior—in fact, it may actually be a convenient justification for those who have already decided that they want to carry out an attack. However, it does appear to be a contributing factor which serves as a catalyst for action. In reality, their deeper motives may be far more complex—as will be discussed later. However, it is clear that some individuals who volunteer to execute a suicide bombing attack are desperately poor, and they do claim that their decision to become a suicide bomber is their last chance to provide a better life for their families (Williams, 2008). In the beginning of the Palestinian intifada against Israel, the price of a suicide bomber was allegedly \$2000 (Charny, 2007). In other words, individuals who volunteered to partake in suicide bombing attacks were promised by terrorist organizations that their families would receive \$2000 after their successful execution of the suicide bombing mission—a very large sum of money in that social context. However, after the attacks, families have complained that the payoff turned out to be less than the promised amount, because the local warlords assigned by terrorist organizations to deliver the money to the family would take out their share as well (Charny, 2007). By contrast, the price of life of an Iraqi suicide bomber has been noted to be much higher. Before his downfall, Saddam Hussein apparently raised the financial reward given to suicide bombers' families from \$10,000 to \$25,000 (Charny, 2007). In some cases, this monetary increase may have been the final factor for recruiting new

volunteers: the suicide bombers claimed that this was the best opportunity for a much better life for their families (Berko and Erez, 2005, Charny, 2007).

On the other hand, there is no evidence that suggests that rampage shooters in the United States have also been motivated by financial rewards, and such individuals do not claim to perform their violent attacks for any monetary gains. However, this difference may once again reflect cultural differences, more than individual ones. If American rampage shooters lived in Middle Eastern communities which approved of their acts and offered financial rewards for their violence, it seems likely that they would have also been tempted by this money. Similarly, like volunteer suicide bombers, these rampage shooters probably would have been eager to claim that their fund-raising actions were noble attempts to provide for their families, despite their true motives for killing and dying being far more complex.

2.4. Gender

Another factor that differentiates rampage shooters from volunteer suicide bombers is gender. Historically, those volunteering and carrying out suicide attacks have strictly been men; however, in recent years, the number of women has been dramatically increasing (Shay, 2004, Zedalis et al., 2004). Even though women suicide bombers were used by the Tamil Tigers in Sri Lanka in the late 1980's (Zedalis, 2004), they were not the weapon of choice in Middle Eastern countries until much more recently. However, since the eruption of the second intifada in Palestine in September 2000, women have volunteered and been accepted for suicide bombing missions against Israelis, and their number is drastically increasing (Berko and Erez, 2005, Zedalis et al., 2004). Furthermore, following the U.S. military invasion of Iraq in March 2003, a significant number of Iraqi women have also volunteered to partake in suicide bombing missions (Zedalis, 2004).

Conversely, the population of rampage shooters in the United States has been almost exclusively composed of male perpetrators (Langman, 2009, Tonso, 2009). In February 2008, female Latina Williams killed two fellow students at Louisiana Technical College and then shot herself in the head (Fox News, 2008). And in February 2010, Amy Bishop opened fire at a faculty meeting at The University of Alabama at Huntsville, killing three colleagues and wounding three more before being arrested by police (Wheaton & Dewan, 2010). However, overall, incidences of women committing such acts of violence are extremely rare (O'Toole, 2000). In his study of 23 post-Columbine school rampage shootings which occurred between 1999 and 2007, Larkin (2009) found that all 23 were carried out by males. In turn, only one of the 11 thwarted rampage attacks he documents involved a female perpetrator, and she was conspiring with a group of four other males.

This gender difference between volunteer suicide bombers and rampage shooters is not easy to explain, but it may be due to an interaction effect between community approval and gender. Both in the United States and the Middle East, males have traditionally been socialized in ways that increase their likelihood of aggressive and violent behavior, particularly when their masculine status is threatened (Ahmed, 2003, Kimmel and Mahler, 2003). And perhaps as a result, for many years, males constituted the vast majority of both rampage shooters and suicide bombers (Kimmel and Mahler, 2003, Larkin, 2009, O'Toole, 2000, Pedahzur, 2005). However, during recent conflicts in the Middle East, men from that region have increasingly

discovered that they lack the ability to regain their masculine status and defeat their enemies without the help of women (Zedalis, 2004). This may be why their communities have shown increased approval of females who will kill and die in support of their religious and political agendas. By contrast, in the United States, females may have actually received less support for defying gender norms by carrying out aggressive and violent acts on their own. But even if this explanation is correct, it may be changing: in both cases, the initial period of male exclusivity may eventually give way to a more evenly balanced gender breakdown of perpetrators.

2.5. Mental disorders

Mental disorders are another factor that appears to distinguish U.S. rampage shooters from Middle Eastern volunteer suicide bombers. In general, researchers have found a strong relationship between mental disorders and criminal behavior in the United States, and rates of mental illness have been found to be much higher among criminals than in the general population (Monahan & Steadman, 1983). More specifically, mental health problems have been found in the majority of rampage shooters cases (Langman, 2009). Previous research suggests that rampage shooters tend to suffer from a number of mental disorders, including clinical depression, schizophrenia, and post-traumatic stress disorder (Langman, 2009). However, it is important to point out that while some of these killers have been diagnosed with mental illnesses prior to their violent actions, others are only diagnosed after their deaths, based on subsequent investigations of their backgrounds.

By contrast, although this perspective may be starting to change, scholars have not yet determined mental health problems to be a common characteristic of volunteer suicide bombers (Piven, 2007). Those who volunteer to participate in suicide bombing missions are generally believed to be rational individuals who are not suffering from any type of mental disorders (Carey, 2007, April 18, Victoroff, 2005). A number of researchers claim that volunteer suicide bombers possess no substantial signs of psychopathology, so they dismiss mental illness as a reason for these violent attacks (Berko and Erez, 2005, Moghadam, 2008). Organizations like Hamas, Hezbollah, and the al-Aqsa Martyrs Brigade that recruit and sponsor a great number of suicide bombers also claim that they do not rely on mentally ill volunteers (Pape, 2003). Their rationale is apparently that the mentally ill would be unreliable and ineffective killers, and thus less than ideal for their purposes (Piven, 2007).

However, this purported difference between rampage shooters and volunteer suicide bombers may actually reflect cultural differences, rather than individual ones. A great deal of research suggests that diagnoses of mental disorders are often subjective, and may be based on how deviant or destructive an individual's behavior is perceived to be in that context, rather than on some truly objective set of criteria (McCaghy, Capron, Jamieson, & Carey, 2006). For example, the effect of political values on the evaluation of mental disorders has certainly been seen before: in the Soviet Union, political dissidents were commonly diagnosed with psychopathic personalities, schizophrenia, or abnormal paranoia, despite their apparent mental acuity (McCaghy et al., 2006). In addition, the effect of expectations on the diagnosis of mental disorders also calls this alleged difference between rampage shooters and volunteer suicide bombers into question. In the classic experiment "On Being Sane In Insane Places," Rosenhan (1973) showed that psychiatrists and other professionals in the field often

unconsciously shape their diagnoses to fit what they expect to see, given their initial assumptions about an individual's mental health.

It seems quite possible that volunteer suicide bombers are thus assumed to be mentally fit in the Middle East, even though they would have been diagnosed with mental disorders had they lived in the U.S. In fact, there has been growing evidence in recent years that at least some suicide bombers displayed classic signs of mental illness before their deaths. For instance, two Iraqi female suicide bombers who struck in 2008 were reported to have had severe mental disorders, and other volunteer suicide terrorists in Palestine and Afghanistan have displayed classic suicidal traits (Lankford, 2010a, Lankford, 2010b, McElroy, 2008, February 2, Merari et al., 2010). However, given the heroic portrayals of such “martyrs” (Abdel-Khalek, 2004, Charny, 2007, Gunaratna, 2002, Hafez, 2006, Hoffman, 2006, Juergensmeyer, 2008), it is not surprising that their local communities, their family members, and the terrorist groups which armed them attempt to protect their reputations by dismissing any possibility that they may have been mentally ill.

Along these same lines, some of the American rampage shooters might have been considered rational actors by their communities, had they grown up in the Middle East and chosen to attack culturally despised targets of an Israeli or Western nature. After all, the mental health problems of school shooters are often exaggerated after their attacks, due to cultural attempts to put their violent behavior in context. As Larkin (2009, p. 1320) observes, “Prior to the shootings, they were average teenagers: afterward, they became evil, mentally unbalanced monsters; psychopaths; and instruments of the devil.” Ultimately, there may be almost no significant differences between the mental health problems of volunteer suicide bombers and rampage shooters.

3. Similarities

The preceding review indicates that the differences between volunteer suicide bombers in the Middle East and rampage shooters in the U.S. are not as substantial as they may appear on the surface. For the most part, the significant differences appear at the cultural level, not the individual one. However, in terms of their underlying psychology and motivation, these volunteer suicide bombers and rampage shooters appear to have many things in common. Many of these factors are not unique to these two types of killers—for instance, many people experience troubled childhoods or oppressive social environments. On the other hand, what is much more rare is the combination of factors which both rampage volunteer suicide bombers and suicidal rampage shooters often share.

3.1. Troubled childhoods

In general, previous research has found strong relationships between childhood suffering, delinquency, and criminality (Hosser et al., 2007, Maschi, 2006, Perez, 2000). In addition, childhood victimization has been determined to be strongly related to substance abuse, sex crimes, prostitution, promiscuity, teenage pregnancy, and a number of violent crimes (Carr and Francis, 2009, Vaddiparti et al., 2006, Widom and Kuhns, 1996). Therefore, it should not be particularly surprising that the violent actors in these cases have often suffered

from a troubled childhood—although this is just one of the many factors which contributes to their ultimate attacks. This appears to be a key similarity between volunteer suicide bombers in the Middle East and rampage shooters in the U.S. The range of their disturbing childhood experiences includes being repeatedly harassed, bullied, or abused as a child, witnessing abuse, growing up in dysfunctional families, and growing up in conflict-ridden refugee camps (Andoni, 1997, Berko and Erez, 2005, Hafez, 2006, Langman, 2009, O'Toole, 2000).

For instance, in an Israeli prison study on Palestinian suicide bombers who were caught before being able to detonate, a number of the volunteers reported troubled childhoods (Berko & Erez, 2005). One female interviewee recounted a somewhat typical story of early suffering. Her father died when she was very young and her mother decided to remarry, in defiance of cultural norms. As a result, she was taken away from her mother and was raised by her grandmother and unmarried aunts. In prison, this woman admitted that she had always blamed her mother for abandoning her in favor of a new husband, and it seems likely that this psychological trauma played a role in her eventual decision to volunteer as a suicide bomber (Berko & Erez, 2005). Some male suicide bombers reported similar stories; however, they were devoted to their mothers and resented their fathers for marrying younger second wives. The second marriage created tension, conflict, and competition between both the wives and their respective children for the father's attention. The new marriages also increased the financial strains on the family, and paying the bills became a constant source of anxiety. These young men summarized that they grew up feeling rejected, neglected, humiliated, and traumatized, and this appears to have contributed to their decision to volunteer for suicide attacks (Berko & Erez, 2005).

Similarly, childhood suffering also appears to be common among rampage shooters. The story of Jeffrey Weise illustrates this point. He was traumatized as a juvenile, and then in 2005, he went on a shooting spree, killing nine people and injuring five more, before he eventually shot himself in the head (Langman, 2009). Weise's parents were unmarried, and when at age three he moved in with his alcoholic mother, he was verbally and physically abused. His mother and her boyfriends used to lock him out of the house, make him kneel in a corner for hours, and lock him in closets (Zenere, 2005). Then at age eight, Weise lost his father to suicide, and at age 10, his mother suffered severe brain damage after a car accident and she was moved to a rehabilitation facility. In summary, Weise clearly experienced severe childhood trauma, and it seems quite likely that this contributed to his deadly shooting rampage (Langman, 2009).

Others who seem to have had troubled childhoods include mall shooter Robert Hawkins, Columbine killers Dylan Klebold and Eric Harris, Virginia Tech gunman Seung-Hui Cho, and gym shooter George Sodini. Hawkins parents divorced when he was three, and he was later removed from his home by the state and became estranged from his parents. As a classmate explained, "He had it rough as a kid...He seemed like someone that nobody wanted to deal with. He was in the system since eighth grade. He just got dropped off in the adult world, and that was it" (Celizic, 2007). In turn, Klebold's mother recounts that her son was always very hard on himself when he lost in games, even as a small child, but that his problems really started in early adolescence, when he became painfully shy and uncomfortable, suddenly began to dislike school, and even got expelled for hacking into the school's computer system (Klebold, 2009). Klebold had an okay relationship with his parents, but claimed he was constantly looked down upon by his other relatives and "ripped" by his older brother and

brother's friends (Gibbs & Roche, 1999). Fellow Columbine shooter Harris apparently had a troubled childhood as well—in videotapes made shortly before the attacks, he specifically references feeling displaced as a military brat: the constant moves and switching of schools made him feel like a permanent outsider (Gibbs & Roche, 1999). Klebold and Harris also engaged in delinquent behavior, and were charged with mischief, breaking and entering, trespassing, and theft as teenagers, nearly 18 months before their rampage attack. These crimes do not appear to be a cause of their attack, but rather another symptom of their troubled youth. In turn, Cho was considered “very cold” by his relatives at an early age, he struggled to deal with the move from South Korea to the U.S. at age eight, and then he was mercilessly bullied and shoved around as early as middle school for being shy and not speaking English fluently (Apuzzo & Cohen, 2007). Childhood troubles were apparently common for Sodini as well. Years later, writing on his internet blog, he wished that he could go back to his youth to “fix things.” In his sarcastic rant, marked by pain, he wrote “Thanks, mum and brother...And dad, old man, for TOTALLY ignoring me through the years” (Sodini, 2009).

As is the case with volunteer suicide bombers, these rampage shooters did not attack solely because of their troubled childhoods. Indeed, many troubled children grow up, do much better as adults, and live relatively normal lives. However, this does seem to be an important link between the two types of attackers.

3.2. Oppressive social environments

Another key similarity between volunteer suicide bombers in the Middle East and rampage shooters in the U.S. is that both appear to be products of oppressive social environments. Previous research across a range of cultures has shown that social and contextual factors often increase the likelihood of violence (Lankford, 2009a, Milgram, 1963, Waller, 2002, Zimbardo, 1972, Zimbardo, 2007). Although the vast majority of people living in these exact same situations do not engage in violence, for some individuals, these social pressures are absolutely critical (Pickeft, Iannotti, Simons-Morton, & Dostaler, 2009).

Previous scholars have demonstrated that oppressive environments appear to be a significant reason why some people volunteer to carry out suicide bombings (Charny, 2007, Hafez, 2006). For instance, in Palestine, rates of unemployment have soared, and jobs have become extremely difficult to obtain, due to high levels of transit restrictions imposed by the Israeli army (Andoni, 1997). In addition, many Palestinians live in extreme poverty and horrible conditions. On a daily basis, they have to witness the horrendous and devastated condition of their community, the humiliation of their people, and the misery and devastation on the faces around them (Piven, 2007). As Baer (2008) explains, the Gaza Strip is “a place of desperate poverty and human misery; it's about as far from paradise as you could ever be.”

Because of the severe conditions of the Israeli occupation, many Palestinians struggle to gain a sense of security, and thus live in a constant state of fear (Berko & Erez, 2005). In recent years, similar observations could certainly be made about parts of Iraq and Afghanistan, where increased conflict, economic strains, and insecurity has been accompanied by a skyrocketing number of volunteer suicide bombers. In these contexts, feelings of hopelessness, worthlessness, and shame are widespread, and they can be particularly devastating for certain individuals. Sarraj (2003) describes how some Palestinians develop traits of “hopelessness and

despair...the kind of despair that comes from a situation that keeps getting worse, a despair where living becomes no different from dying” (p. 36). And some decide that continuing to live such a life is far less appealing than a noble death. However, it is not just any form of death that they are drawn to—dying heroically in an act of martyrdom is considered the most appealing vehicle of departure from this unworthy world (Berko and Erez, 2005, Hafez, 2006). As Naisa (2007) observes, for many, the environment has become “hell on earth,” and “the blocked horizons, the persecution, the oppression, and the exploitation turn a human being into a time bomb.” Along these lines, one young Palestinian suggests that those who wish to see the reasons for suicide bombing should simply “Look around and see how we live here. Then maybe you will understand why there are always volunteers for martyrdom” (Jacobson, 2001). A suicide bomber who was arrested before he detonated makes a similar observation: it should be easy to see why martyrdom is so attractive compared to the alternative, “especially when you consider the state of our country, the conditions of the occupation...death is death, everyday” (Baer, 2005).

Rampage shooters also appear to be responding to their oppressive surrounding environments when they choose to attack. Even if their life at home may seem okay, school shooters often find school—the place where they spend such a tremendous amount of their time—to be a particularly traumatic place. Although American schools are not nearly as hopeless or war torn as certain parts of Palestine, for some individuals, being forced to go to school day after day begins to feel like a similarly unbearable fate. As Newman (2007) explains, for these troubled students, the relatively common experience of being picked on at school becomes something much more serious. For them, going to school begins to feel like a “life sentence” (Newman, 2007, p. 29). In addition, previous research suggests that the because today's schools put such a predominant emphasis on athletic success, academic success, and overall competition between students, they also increase the amount of shame experienced by those who lose (Newman et al., 2004, Thompson and Kyle, 2005). These oppressive social environments can promote a sense of alienation among students who are not popular or athletic, which can lead to their violent attempts to compensate (Thompson & Kyle, 2005). For instance, this appears to be one of the reasons why Virginia Tech shooter Seung-Hui Cho carried out his fatal attack. Apuzzo and Cohen (2007) describe the kind of classroom interaction that was all too common for Cho: “In high school, [he] almost never opened his mouth. When he finally did, his classmates laughed, pointed at him and said: ‘Go back to China.’” Similarly, oppressive school environments seem to have been a primary factor in many other cases, including Luke Woodham's 1997 rampage attack in Pearl, Mississippi, Pekka-Eric Auvinen's 2007 shooting spree in Tuusula, Finland, and 10 thwarted attacks between 1999 and 2007 (Larkin, 2009).

Although pointing to an oppressive social environment as the sole cause of the Columbine attacks is a drastic oversimplification (Cullen, 2009), it does seem to be one of the significant reasons for the rampage. Evan Todd, a 255-pound member of the Columbine high school football team, explains how he and his classmates were unyielding in their harassment of Harris and Klebold:

Columbine is a clean, good place except for those rejects...Most kids didn't want them there. They were into witchcraft. They were into voodoo dolls. Sure, we

teased them. But what do you expect with kids who come to school with weird hairdos and horns on their hats? It's not just jocks; the whole school's disgusted with them. They're a bunch of homos, grabbing each other's private parts. If you want to get rid of someone, usually you tease 'em. So the whole school would call them homos, and when they did something sick, we'd tell them, "You're sick and that's wrong" (Gibbs & Roche, 1999).

Harris's accounts reveal the same story; as he recalled, kids picked on "my face, my hair, my shirts" (Gibbs & Roche, 1999). Given the troubling nature of this environment, it is easier to see why he specifically referenced wanting to "'kick-start a revolution' of oppressed students who had been victimized and bullied by their peers" (Larkin, 2009, p. 1312).

Again, it is important to point out that many of the Palestinian, Iraqi, and Afghan volunteer suicide bombers experience oppressive social environments which are far more severe than anything most rampage shooters encounter at school. However, the similarities are still meaningful. In fact, the connections even extend to perceptions of harassment and bullying, which are so common among school shooters. For instance, Israeli forces are often seen as "bullies" who abuse Palestinian's rights on a daily basis—persecuting them and humiliating them in the name of security, seemingly on a whim (Byman, 2006, PBS, 2009, July 17, Rosen, 2008, December 30). And very similar charges were repeatedly levied against U.S. forces in Iraq and Afghanistan, prior to the spike in suicide bombings in those regions (Lankford, 2009b). Again, in both cases, those who decide to carry out acts of murder–suicide are living in contexts where they feel vulnerable, oppressed, and trapped. Ultimately, violence and death appear to be their way out.

3.3. Low self-esteem

Another variable found to be common for both volunteer suicide bombers in the Middle East and rampage shooters in the U.S. is low self-esteem. Although an over-inflated sense of one's importance can yield its own set of problems, previous research has shown that, in general, those with low self-worth are particularly likely to engage in both violence and suicide (APA Commission on Violence and Youth, 1992, Durkheim, 1897, Farber, 1968, Lester, 1997, McGee and Williams, 2000, Reasoner, 1994, Stancato, 2003).

Middle Easterners who volunteer for suicide bombing missions often exhibit low self-worth. Some attribute the low self-esteem of Palestinian suicide bombers to the living conditions under Israeli occupation (Davis, 2003). It seems quite possible that the humiliation and shame they experience on a daily basis affects their perception of their own value. In addition, the inability of the Palestinian government to bring about change, and the continued hopelessness within Palestinian communities, appears to decrease some individuals' sense of self-worth as well (Andoni, 1997). However, those who volunteer as suicide bombers seem to take it much more personally than their neighbors. As Robins and Post (1997) point out, "beneath the discontent with the society is discontent with the flawed self" (p. 97). Along these lines, as one recruiter of volunteer suicide bombers explains, he specifically tried to find "'sad guys'...those who were social nonentities and had no status but who might get recognition by

dying, those with low self-esteem...and bitterness at their marginality, and who are willing to try anything to feel they have worth" (Berko, 2007, p. 7).

On the surface, rampage shooters may sometimes appear arrogant and self-glorifying, but more often than not, they are actually characterized by low-self esteem (O'Toole, 2000). It appears that many rampage shooters in the United States perceive themselves as virtually worthless. Given the degree to which they are bullied and picked on, the damaged self-esteem of school shooters is of little surprise. As Newman (2007, p. 29) explains, they are generally "dweebs and misfits...losers who experience constant rejection." And even outside of the school shooting context, Robert Hawkins and George Sodini are clear examples of this phenomenon. In a eerily similar description to the "sad guy" suicide bombers in the Middle East, foster parent Debora Maruca-Kovac described mall shooter Hawkins as a "lost puppy nobody wanted" (Hines, 2007). And one of the most common reoccurring themes in gym shooter Sodini's internet blog was the subject of confidence—how he lacked it, envied those who had it, and desperately longed to gain it (Sodini, 2009).

3.4. Personal crises

In general, personal crises often precede violence and suicide: when something suddenly goes wrong in people's lives, they appear more likely to harm others and harm themselves (American Association of Suicidology, 2009, APA, 1999, Durkheim, 1897, Farber, 1968, Gernsbacher, 1985, Lester, 1997, Workplace Violence Prevention Operations Committee, 2007). Personal crises also seem to be a common precipitating cause of suicide bombings in the Middle East and rampage shootings in the U.S. (Moghadam, 2008, O'Toole, 2000, Pedahzur, 2005). However, there is often a gap of weeks or even months between the crises and the attacks, during which coping mechanisms fail and psychological distress steadily grows.

For instance, Pedahzur (2005) outlines a number of personal crises that have led people in Middle Eastern communities to volunteer for suicide bombing, including accusations of adultery, unwanted pre-marital pregnancies, financial problems, job problems, poor health, and the death of a loved one. In Middle Eastern societies, the concept of honor is tremendously important, and is often valued even more highly than life (Onal, 2008). Individuals—and especially women—who get entangled in romantic scandals are considered to have brought dishonor to their families, and can expect to face extreme social condemnation, reprimands, and harsh punishments (Onal, 2008). Therefore, individuals in Middle Eastern societies who have engaged in such activities and fear that they will be revealed may determine that volunteering for a suicide mission is their last chance to save their honor and that of their families (Charny, 2007, Pedahzur, 2005). For instance, Wafa Idris, the first Palestinian woman suicide bomber, suffered a miscarriage which left her unable to get pregnant again, and was subsequently divorced by her husband (Charny, 2007). Intensely shamed, she returned to her mother's house, but experienced severe social condemnation and was labeled as a "divorcee who could not have children" (Pedahzur, 2005, p. 139). Ultimately, her personal crisis, her husband's insensitivity, and her feelings of humiliation, emptiness, and loss stripped her of life's joys and pushed her into the arms of death. On January 27, 2002, Idris detonated a powerful explosive in the center of Jerusalem, killing an Israeli man and herself and injuring more than a hundred people (Charny, 2007, Pedahzur, 2005). The other types of personal crises noted by

Pedahzur have produced similarly murderous results. The details vary, from a teenager who contracted the HIV virus and could not handle the stigma of the “homosexual” disease, to a young female lawyer named Hanadi Jaradat who was traumatized by her brother's sudden death (Hafez, 2006, Pedahzur, 2005). As Jaradat's mother recounted, her daughter “was full of pain. She saw them taking the body [of her brother] from the hospital to the morgue, and she was different after that. Some nights she woke up screaming, saying she had nightmares about Fadi” (Hafez, 2006, p. 49). A few months later, Jaradat carried out a suicide bombing in an Israeli restaurant, killing 21 people and injuring 60 more (Baer, 2008).

Rampage shooters often respond to personal crises by carrying out violent attacks as well. A 2002 U.S. Secret Service and Department of Education report on school shootings makes this point quite clear:

Almost all of the attackers had experienced or perceived some major loss prior to the attack...These losses included a perceived failure or loss of status...loss of a loved one or of a significant relationship, including a romantic relationship...and a major illness experienced by the attacker or someone significant to him (Vossekuil, Fein, Reddy, Borum, & Modzeleski, 2002, p. 23).

Outside of the school context, similar personal crises also appear to drive other rampage shooters to kill. For instance, two weeks prior to his rampage, Robert Hawkins was dumped by his long-term girlfriend, which caused him tremendous emotional distress. He had also recently been fired from his job at McDonald's because the cash register was missing \$17, and to make matters worse, he was awaiting a court trial for underage possession of alcohol (Hines, 2007). It appears that the combination of these personal crises took such an emotional toll on Hawkins that he decided to strike. In turn, one of George Sodini's last blog posts indicates that a personal crisis may have been the final reason for his attack. However, it is important to point out that this crisis was primarily in his mind—it stemmed from his expectations about upcoming events, and not a recent occurrence. As he wrote, “I predict I won't survive the next layoff. That is when there is no point to continue...The paycheck is all I have left. The future holds nothing for me...Also unlikely to find another similar job. I guess then is when I take care of things” (Sodini, 2009). The fear that he was about to lose his job may have been the trigger for Sodini to carry out his murderous attack. In other cases, personal crises that clearly sparked rampage shootings have been harder to pinpoint. However, like in Sodini's case, these rampage shooters may have been in crisis about events they anticipated, rather than events that had recently occurred. Without explanatory blog postings or suicide notes, it can be impossible to know for sure.

3.5. Revenge

Both volunteer suicide bombers in the Middle East and rampage shooters in the U.S. are also motivated by desires for revenge. In general, vengeance-seeking is a common cause of aggressive and violent behavior, although most incidents are not nearly this extreme (Chagnon, 1988, Sievers and Mersky, 2006). In these particular cases of murder–suicide, the perpetrators have not only intended to get revenge against those who have personally harmed them, but

also against a general category of people whom they have blamed for their problems. This may be an expression of ingroup–outgroup bias (Brewer, 1979, Tajfel, 1982), whereby people ignore the important differences between individual members of the outgroup and broadly condemn the whole group with distortions and lies, in order to justify imprecise attacks. It is also probably no coincidence that the same oppressive environment where the perpetrators felt vulnerable and insecure is often where they choose to strike back: both the setting and the people become broadly categorized as “the enemy.”

Previous research has established that the desire for revenge serves as one of the strongest motivating factors among perpetrators of suicide bombing—especially in Palestine (Berko and Erez, 2005, Pedahzur, 2005). An analysis of 180 suicide bombers in Palestine during the second intifada confirmed that close to half of them were motivated by the need to avenge the death of a loved one (Pedahzur, 2005). However, it should be noted that the perpetrator does not have to suffer such a major loss in order to be motivated by revenge. The suffering of the community to which the offender belongs can be sufficient grounds for violent retribution, at least in the eyes of the killer (Pedahzur, 2005). Many volunteer suicide bombers have stated that they wanted to hurt the enemy the same way that the people in their community were hurting, in order to make their enemy suffer the pain it had inflicted upon their people (Berko & Erez, 2005). However, it is important to point out that they carry out attacks on a general type of enemy—such as the Israeli people—rather than specifically targeting just Israeli soldiers, or even more narrowly, the individual Israeli soldiers who directly harmed them. The story of 23 year old Palestinian Jamal Nasser is a somewhat typical example. According to a letter and video found after his suicide attack, he wanted to avenge the death of all the innocent Palestinians who had suffered at the hands of Israeli soldiers (Hafez, 2006, Pedahzur, 2005). However, rather than attack those who may have directly harmed him or his countrymen, Nasser detonated an explosive device near a school bus of children. A similar pattern is apparent in the aforementioned case of Hanadi Jaradat, which resulted in one of the deadliest suicide bombing attacks against Israeli civilians in the history of the Israeli–Palestinian conflict. Jaradat's older brother Fadi and her fiancé Salah were both killed by Israeli soldiers. Fadi was shot near their house and Jaradat witnessed him die in a pool of blood. Several months prior to her suicide attack, she visited her brother's grave and swore revenge, stating “Your blood will not have been shed in vain. The murderer will pay the price and we will not be the only ones crying” (Pedahzur, 2005, p. 149). Yet again, this suicide bomber did not make her brother's actual murderers pay—but rather other Israelis whom she categorized as part of the enemy outgroup. When she blew herself up in an Israeli restaurant, her victims included two families, four children, and a two-month-old baby (Baer, 2008, Hafez, 2006).

Along these lines, rampage shooters are often similarly motivated by desires for revenge—and similarly imprecise about who they target for it (Thompson & Kyle, 2005). On the one hand, they are often quite clear about who they blame for their suffering. Seung-Hui Cho stated that he had been treated like a “pathetic loser” by certain people and had experienced them spitting on his face and shoving garbage down his throat (ABC News, 2007). He claimed that such students had “vandalized” his heart, “raped” his soul, and “torched” his consciousness (ABC News, 2007). Similarly, like many rampage shooters, Jeffrey Weise was seemingly motivated to strike back against those who had bullied and harassed him his whole life (Langman, 2009). And as school shooter Luke Woodham explained, his own attack was

designed to show those who had mistreated him “push us, and we will push back” (Larkin, 2009, p. 1313). In turn, both Eric Harris and Dylan Klebold held grudges against many of their classmates in general, but “especially a few people” who had wronged them in the past (Gibbs & Roche, 1999). However, in all of these cases, when the rampage shooters' attack plans took shape, their specific desires for revenge got much more general. As Newman (2007) explains, it almost appears that “the perpetrators select victims at random and seldom know whom they have killed until after the event. At most they select a category of victims (jocks, prayer circles)” (p. 28). Again, this seems quite similar to the behavior of volunteer suicide bombers, who are driven by specific desires for revenge but ultimately kill people whom they have not actually been harmed by in any direct way.

3.6. Fame and glory

One of the most significant similarities between volunteer suicide bombers in the Middle East and rampage shooters in the U.S. is that both are often driven by the desire for fame and glory. Although there are many law-abiding people who share these general desires, when it comes to violent crime, this is an extremely rare motive. In the past, there have been some serial killers who directly sought fame, but they are far and few between (BBC News, 2006, March 16, Douglas, 2007, Schmid, 2005). The fact that this unusual motive is apparently so common to both volunteer suicide bombers and rampage shooters is further evidence of their underlying connection.

Prior research suggests that for many volunteer suicide bombers, the fame and glory that comes with martyrdom in the Middle East is a prime motivating factor. As Charny (2007) summarizes, “Being a suicide bomber promises fame and honor for one's identity” (p. 63). Such individuals are fascinated by the fact that after their death, suicide bombers are elevated to the highest levels of social status—as are their families. Thus, for persons with low self-esteem who may have felt like outcasts or underachievers their entire lives, the path to fame and glory is extraordinarily appealing (Pape, 2003). As Kruglanski et al. (2009) explain, despite their attempts to portray their attacks as noble sacrifices for the greater good, ultimately, these individuals are engaging in a “quest for personal significance” (p. 331). In a deeper sense, their desperation for fame and glory is a desire for what Hafez (2006) refers to as “redemption” and the “salvation of self” (p. 34), what Post et al. (2009) describe as “significance for the insignificant” (p. 21), and what Pastor (2004) summarizes as “self-fulfillment...material rewards, status advancement, [and] conspicuous demonstration of bravery” (p. 704).

Recruiters of volunteers for suicide bombing make the most of these selling points with their production and distribution of martyrdom videos, murals, calendars, key chains, posters, postcards, and pennants (Hoffman, 2006). Volunteers can be convinced that in death they will be eternally famous, even though they will not get to experience their glory in the physical world (Shay, 2004). Suicide bomber Shadi Nassar is a somewhat extreme, although fitting, example of this phenomenon. He was injured as a child, and the rest of his life, he suffered from permanent disability and chronic epileptic episodes. Within the community, he was constantly rejected, humiliated, and mocked by his peers. He eventually determined that the only way to get the attention and respect he craved was to volunteer as a suicide bomber, and

sure enough, soon after his attack, there were posters with Nassar's image on every wall and corner of his village (Pedahzur, 2005).

Many rampage shooters also carry out their attacks in order to gain fame and glory. Larkin (2009) identifies this motive as critical for Jeffrey Wiese, Seung Hui Cho, Robert Hawkins, Eric Harris, and Dylan Klebold, among others. He labels it "Killing for notoriety" and explains that "The body count, almost always innocent bystanders, exists primarily as a method of generating media attention" (Larkin, 2009, p. 1322). This description is remarkably similar to that used by terrorism scholars when describing the objectives of suicide attacks. And much like volunteer suicide bombers, rampage shooters' compensatory desire for fame and glory appears to be rooted in their lack of self-esteem. As Newman (2007) explains, "they are searching for a way to retire their public image as dweebs and misfits, exchanging it for something more alluring: the dangerous, violent man" (p. 29). Furthermore, much like suicide bombers, rampage shooters commonly leave behind letters, manifestos, and videotapes, so that their new identity will live on. For instance, when Hawkins failed to achieve recognition through traditional means, he resorted to deadly violence as his last opportunity to be known. As his foster mother explained, Hawkins wrote in his suicide note that "He was a piece of shit all of his life and now he'll be famous" (Hines, 2007).

Similarly, in videotapes, Harris and Klebold discussed the public aftermath that would likely result from their attacks. As Harris exclaimed, "Isn't it fun to get the respect that we're going to deserve?" (Gibbs & Roche, 1999). They also talked about their expectations that a movie would be made about their lives. Klebold claimed that "Directors will be fighting over this story," and he and Harris argued about whether it would be better to have Steven Spielberg or Quentin Tarantino in charge of the movie's production (Gibbs & Roche, 1999). In turn, Harris hoped that their future film would include "a lot of foreshadowing and dramatic irony" (Gibbs & Roche, 1999). The Columbine killers' desires typify that of many rampage shooters. As Larkin (2009) explains, they often seek fame and are attracted to the idea of "dying in a blaze of glory" (p. 1323).

4. Conclusion

Major Nidal Hasan's deadly strike on the Fort Hood army base in Texas indicates just how blurred the distinction between rampage shooting and suicide terrorism has become. But it actually appears that the blurring started much earlier—with some rampage shooters referring to themselves as "martyrs," with the Columbine killers' attempting to blow up their cafeteria and wanting to hijack a plane and crash it into New York city, with Sebastian Bosse strapping explosive devices to his body before shooting up his school, and with George Sodini bringing a grenade on a public bus a week before he attacked a local gym and then shot himself in the head.

This review has attempted to bring some clarity to these blurry areas of overlap, by performing a comparative analysis of volunteer suicide bombers in the Middle East and rampage shooters in the United States. Because previous research on the similarities between these two types of killers appears to be virtually non-existent, this review's findings should be considered exploratory. Based on the initial evidence, it appears that the primary differences between volunteer suicide bombers in the Islamic world and rampage shooters in the U.S. exist

at the cultural level, not the individual one, and thus may be more instrumental in shaping the form of their violence than in causing the violence itself. It seems quite likely that many of these rampage shooters would have carried out suicide bombings, had they been born in the Middle East and steered in that direction by those around them. And a similarly altered attack style might be seen if suicide bombers found themselves in the U.S., as the gun-wielding case of Hasan at Fort Hood shows. Furthermore, in terms of their underlying psychology and motivation, these volunteer suicide bombers and rampage shooters appear to be quite similar. In both cases, there is evidence that the individuals who end up carrying out murder-suicide often share many of the following characteristics: (1) they had troubled childhoods, (2) they lived in oppressive social environments, (3) they suffered from low self-esteem, (4) they were triggered by a personal crisis, (5) they were seeking revenge, and (6) they were seeking fame and glory.

In the past, there has been a great deal of separate research on suicide bombers and rampage shooters. Hopefully, this review has raised questions about their underlying connections, and will thus prompt further investigations into this matter. By applying what previous scholars have discovered about rampage shooters to suicide bombers, and vice versa, it may be possible to develop new approaches for identifying those at risk and preventing future attacks.

For instance, in the U.S., school officials and law enforcement professionals have been encouraged to employ a “fact-based threat assessment approach,” whereby they ignore misleading demographic profiles and instead look for specific behavioral and communication patterns among students (Vossekuil et al., 2002, p. 41). For example, if they learn that someone has suffered a recent personal crisis and has expressed a strong desire for revenge, they understand that this individual may be considering a rampage attack and that an intervention is essential. These types of security strategies should now be applied in the counterterrorism realm. In particular, given rising concerns about homegrown terrorism carried out by American citizens of various ages, genders, races, and ethnicities (Fox News, 2010), these methodologies may prove far more effective at ensuring national security than attempts to identify terrorist suspects through ethnic or religious profiles. And as future researchers continue to gather evidence on the similarities between rampage shooters and suicide terrorists, these early-warning systems could be updated and improved so that they become much more precise.

On the other hand, existing counterterrorism strategies from around the world may also be more applicable to the prevention of rampage shootings than previously thought. For instance, Israeli officials employ many innovative screening methods for airport security that help them identify suspicious passengers, ranging from quick “behavioral analysis checks” to methods of “invasive questioning” (Schreiber, 2008, p. 49). These strategies might be useful for high-risk schools, and could make them far safer than their current reliance on metal detectors. In addition, these methods could help authorities identify individuals in need of counseling or other treatment at an early stage. Similarly, workplace administrators hoping to recognize troubled employees before violence arises could likely benefit from some of these counterterrorism techniques.

These are just a few examples—the possibilities are endless. As we look ahead, it is absolutely critical that we continue to refine and improve our security approaches, but also that these changes reflect cutting-edge scholarship. Technological advancements have ensured that

rampage shooters and suicide bombers possess more individual killing power today than at any previous point in human history. It is only through corresponding scientific advancements, whereby we increase our understanding of these killers and what motivates them, that we can act before it's too late.

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