Gun Violence in America – A Tri-Vector Model

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Abstract
Firearms have been a part of United States' culture since America's birth. Gun violence – both heroic and horrific – has also been a long-standing part of American culture. Over the past 20 years we have seen a rise of attempted mass shootings, called an 'active shooter event'. The author presents a model with which to better understand the forces that may generate gun violence, particularly active shooter events. This model, called the Tri-Vector Model, integrates strong developmental, cultural, and social forces, along with developmental neurophysiology, to explain what may lead certain individuals to believe their acts of gun violence are not only permissible but even heroic. In this paper the author presents this model as a way to better understand the etiology of rising gun violence in America, and to consider potential methods to decrease and prevent such violence.

KEYWORDS
Active Shooter, Chosen Trauma, Empathy, Gun Violence, Large Group Identity, Mentalizing, National Trauma, Social Forces, Transgenerational Transmission, Tri-Vector Model

Firearms have been part of the United States' culture since America's birth. "The gun" has a special, almost exalted place, symbolically, in our cultural history and national lore. It commands an important role and image in our national large-group identity. This image is largely positive, heroic, and nearly magical. The firearm is, in fact, the only object specifically named and protected in the US Bill of Rights (United States Constitution – 2nd Amendment), and holds a central, heroic place in centuries of American stories, books, movies, and childhood fantasies. At the same time, the gun can be an object of fear and symbol of power.

Gun violence – both heroic and horrific – has also been a part of our culture from the time of the Pilgrims to the present day: America was born of war and has conquered its land by armed force. We read daily accounts of drive-by shootings, robberies-gone-bad, and view a lifetime of televised images of war's carnage.

Over the past 20 years, however, gun violence has taken on a new form: we have seen the evolution, and increasing frequency, of attempted mass shootings which appear to have as their main objective the intent to hurt as many people as possible. No regard seems to be given to the individual traits of the victims; they are victims merely because they were in that location at that time.
The Federal Bureau of Investigation (FBI) has devoted a task force to this phenomenon, which it calls “an active shooter event” (Blair, Martaindale, & Nichols, 2014). This phenomenon was first brought to our national consciousness with the Columbine high school shooting in 1999, and persists in our awareness with increasing frequencies of similar horrific events and media reinforcement.

Most active shooters are unrelated to their victims and the shootings appear to be random (Blair et al., 2014). This leads many commentators to refer to the events as “senseless” and to the shooter as “deranged,” “psychotic,” and “erratic.” We hear the polarized calls for either gun control or increased gun ownership, harsher penalties for gun crimes, and brief, unfocused discussions about “mental health reform.” The public and media all focus on the shooter and the tragedy of the victims. All ask, with the brevity of a news cycle, “How could somebody do this?” and “What can we do to prevent it?” As with any complex problem, we must better understand the phenomenon itself before we can begin to answer these questions.

To better understand the causes of such events and possibly prevent them in the future, we need to have a model that helps explain how an individual transforms an unthinkable act – the apparent random mass shooting of human beings that have no direct connection to the perpetrator – into a permissible, or even heroic one. This model considers strong, shaping forces – Developmental, Cultural, and Social – that can effect such a transformation in rare individuals. A Tri-Vector model is proposed consisting of three vectors, or directional forces:

- **Vector 1 – Developmental:** an internal developmental vector derived from developmental deficits, which may predispose some individuals to directional influences from the other two vectors.
- **Vector 2 – Cultural:** large-group forces and past cultural trauma that become guiding internalized trans-generational introjects.
- **Vector 3 – Social:** strong, pervasive, and directive external social forces.

The model is based on, and assumes, much traditional psychoanalytic theory as background. It relies heavily on the synthesis of four modern areas of psychoanalytic thought: mentalizing; trans-generational transmission of chosen trauma and chosen glories; the body of work over the past 20 years on bullying and school violence; and modern neurophysiology. These elements are fundamental for understanding the necessary conditions that, in some exceedingly rare individuals whom in this article will be called the “future active shooter,” transform “the unthinkable” into something perceived by them as not only thinkable, but even heroic, or “their duty.” This model lays out a developmental etiology that could leave some individuals prone to act in such ways, as well as social forces that consciously and unconsciously encourage, refine, and direct this behavior. Such a model will allow a better understanding of the future active shooter as well as offer methods of intervention to reverse the increasing rate of these incidents. Future elaboration of this model may also shed light on other forms of gun violence in the United States and possibly ways to intervene before violence occurs.

1 | THE ACTIVE SHooter

The FBI defines the active shooter as “an individual actively engaged in killing or attempting to kill people in a confined and populated area, typically through the use of firearms” (Blair et al., 2014). At this time, the FBI reports that these active shooters do not fit a specific demographic profile other than male gender predominance. In a study looking at active shooter events from 2000 to 2012, the active shooters’ ages ranged from 13 to 88 years old; race and ethnic categories varied; geographic location of shooters and episodes varied. There were few apparent connections with the victims. In 55% of attacks the shooter had a connection with the attack location. In 42% of cases reviewed the shooter committed suicide on the scene, another 6% surrendered at the scene, and 47% were shot or subdued on the scene. In only 5% of those cases examined did the shooter leave the scene of the incident (FBI, 2014).
The earlier data indicate that survival, or any return to the shooter's existence prior to the event, was almost universally not a part of the shooter's thoughts, plans, or internal representation of the planned event. This is in sharp contrast, if not diametrically opposed, to most other acts of violence. That is, in almost all other acts of violence carried out with a weapon, there is a further goal after the violent act such as a plan to escape, or a purpose for the violence beyond the violence itself. Another distinction from the vast majority of other crimes involving gun violence is that violence involving the active shooter has an apparent lack of externally understandable causes. With almost all other crimes involving a gun, i.e. robbery, revenge, accident, suicide, gang violence, rape, etc., there is a linear, logically understandable reason or function to the crime.

It is understandable that a surface inspection of the statistics earlier makes an active shooter's motivations appear baffling and "senseless." To better understand the active shooter we must look at the theoretical internal and external elements, or vectors, that form, shape and direct him and his behavior.

2 | THE INTERNAL DEVELOPMENTAL VECTOR

Attachment theory, first introduced into psychoanalysis by John Bowlby, continues to be a mainstay of psychoanalytic thought regarding child development. Over the past 25 years, attachment theory has been further elaborated, particularly by Dr Peter Fonagy, to explore the psychological and biological underpinnings of the process called mentalizing. Fonagy, Gergely, and Target (2007 p. 288) defined mentalization as "a form of mostly preconscious imaginative mental activity, namely, perceiving and interpreting human behavior in terms of intentional mental states (e.g. needs, desires and feelings, beliefs, goals and reasons). It is imaginative because we have to imagine what other people might be thinking or feeling ...". In short, mentalization is an essential process in which the developing child begins to develop and solidify an increasingly accurate and stable understanding, facility, and fit of both the child's internal perception of psychic reality – and an understanding of the psychic reality and intent of others – with external reality.

By the first year of life infants have the capacity to engage in, and attempt to establish, shared attention with significant others (Fonagy et al., 2007). This may be a precursor to mentalization as the infant can anticipate facial cues, some language cues, and pointing cues. They do not, however, have the capacity to differentiate false belief, fantasy action, or accurate intent. From two to five years of age the developing child develops the capacity for empathy, or emotional understanding of another, as well as a separate developmental task: the attribution of desires, goals, beliefs and reasoning of others (Fonagy & Target, 1996).

Fonagy and Target (1996) propose a developmental model in which the development of a healthy, reflective psychic reality occurs over the ages of two to five years old. This early developmental task is the integration of two early childhood thought modes they refer to as the "pretend" and "psychic equivalence" modes, along with the accurate integration of this developing psychic reality with external reality.

With regard to the "psychic equivalence" mode, Target and Fonagy (1996, p. 459) propose that "in a serious frame of mind, the child expects the internal world in himself and others to correspond to external reality, and subjective experience will often be distorted to match information coming from outside." In this mode the young child regards his own internal states as objective reality and not based on beliefs, emotions, or desire. He will behave as though his inner experience is equivalent to, and thus mirrors, external reality and that by extension others will have the same experience as he does.

They also point out, however, the observation that young children at the same age can make a primitive, but developmentally appropriate, distinction between "playing" and reality. Describing "pretend mode" Target and Fonagy (1996, p. 459) write, "when the child is ... well involved in play, the child knows that internal experience may not reflect external reality, but then the internal state is thought to have no relationship to the outside world, and have no implications for it."

In pretend mode, the child clearly and concretely is able to separate the "rules" of play from the "rules" of external reality. Thus the very young child, still developmentally short of robust and stable mentalization or empathy, can
interact with others in elaborate systems, schemes, and emotions as long as it is all within the fantasy world of play and not connected to external reality. One can readily imagine a three or four year old preparing and proudly serving “tea” to her family, expecting all to drink with gusto and satisfaction.

As the child develops, he or she relies on a stable, trusted, and empathic parent to help integrate the “psychic equivalence” and “pretend” modes of thinking with reality. As the young child grows and continually interacts with the good object (parent) established with appropriate attachment, the child can experiment and reflect its behavior and internal representations off such a parent, as well as appropriately resonate with the parent’s expression and behavior. With repeated and empathic experimental interactions, the child will begin to understand that emotional states are representations and not exact equivalents to, nor independent from, reality. This is primarily due to either close enough but not perfect – or empathic but wrong – assumptions and attributions of affects to internal reality. The developing child will develop continued and more finely tuned re-introductions of the objects’ affect (the infant’s emotional understanding of it) as it relates to the meaning or reasoning conveyed by the object. Ideally, the more this reverberating system is allowed to continue with secure, attached emotional support, the more robust and reliant the burgeoning capacity to mentalize. This allows more appropriate and accurate understanding of, and interaction with, the inferred intent behind others’ affect as well as a better understanding of the developing child’s own internal states.

However, poor, anxiety-ridden, non-existent, or abusive attachment figures would disrupt the development of stable and accurate mentalizing. This can lead to misinterpretation of one’s own internal state as it relates to reality, as well as misinterpretation of the intent or meaning behind others’ actions or affective states. One can easily see how misinterpretation of others’ intent, as well as one’s internal reality, can lead to argument, anger, or violence. It is also believed that threat-related activation of the attachment system deactivates mentalizing by invoking intense arousal and overwhelming negative affect (Fonagy et al., 2007). This may, in some individuals, contribute to a regressive state with regard to mentalizing, empathy, and accurate interpretation of reality’s rules and morals.

Understanding the above developmental processes is crucial for understanding the “future active shooter”.

Over the past decade, there has been much research demonstrating the developmental neural pathways involved in affective and cognitive processing, as well as the neurobiology of empathy in the brain (Decety, 2010). These different, overlapping neural pathways develop early in child development, but also continue to develop into adolescence (Decety & Michalska, 2010; Sebastian et al., 2012). The areas for reasoning about false beliefs or judging someone else’s knowledge – that is, belief attribution – involve the medial prefrontal cortex, temporal poles bilaterally, anterior superior temporal sulcus, and the bilateral temporal parietal junction. The areas associated with understanding and attributing emotions and affect in others include the right parietal cortex, the right fusiform gyrus orbitofrontal cortices, and amygdala, insula, and basal ganglia (Fonagy et al., 2007).

Importantly, Akitsuki and Decety (2009 p. 722) have demonstrated that in adults “the social context in which pain occurs modulates the brain response to others’ pain” (italics added) (that is, whether accidentally or intentionally caused by others), and demonstrated that such modulation overlaps many of the previously described developmental neural pathways. They have also shown that the perception of an “other” as well as perception of agency modulates these neural pathways (Akitsuki & Decety, 2009). We can see here the beginning of a system that can affect the perception of others’ pain depending on perceived agency, which itself will depend on the development of mentalizing. This remarkable interface of biological processes, environmental interactions with others, and internal processing of those interactions is consistent with attachment theory and Theories of Mind, and will be incorporated into our understanding of the active shooter.

This developmental interface between biological brain development and environmental influences may affect an individual’s social interactions from birth through adulthood. It also serves as a functional model wherein early parenting and environmental influences may biologically predispose an individual to have weak or failed development of mentalizing that may persist into adulthood, and may be a biological substrate for regression to earlier, more primitive processing of perception of the affect and intent of others.

Thus, we may infer that good, stable, attachment to a primary caregiver not only attenuates internal anxiety but also allows for the appropriate developmental organization of neural pathways in those centers of the brain crucial for
the development of both empathy and correct discernment of reasoning and intent in self and others. This includes the ability to maintain a reality-based connection with the other, and a reality-based assessment of the other's intended actions and meaning.

Therefore, for an exceedingly small group of people with a developmentally faulty or weak capacity for mentalizing due to failures in the previously described developmental tasks, there may be regression to earlier states of mind where there is a failure in the ability to correlate internal belief systems, as well as the beliefs and intents of others, with reality. That is, a break in the ability to correctly assess self and/or others’ intent, motives, or beliefs during certain interactions. They will, instead, like a pre-mentalizing child, attribute meaning, intent, and purpose to self and others according to their pre-mentalizing apparatus: the "pretend" or "psychic equivalence" mode. Here, the individual will make assumptions about others, as well as their own functioning and purpose, in self-generated and self-perpetuated internal sets of rules not necessarily congruent with reality. The rules they rely on are more congruent with play or fantasy, which becomes their view of reality. Their inner world would more closely correlate with the state of mind of young children at play where the parameters and beliefs are fully subsumed in the internal rules and beliefs of the individual child. For these individuals with poor capacity for mentalizing, the regression is to a stage prior to the full development of functional empathy. This creates the pathological condition wherein a teen or adult is operating with the same regard for others’ lives and well-being as a young child would for characters during play.

Also for these regressed individuals their internal belief system, or "rules of the game," are not random but rather are determined by internalized, specific, infantile beliefs and values that may direct them to violent expression toward others. To know more about how these rules are influenced we must look at some external forces operating on the individual. The following section describes some of the large-group forces that help channel such a regressed individual toward gun violence.

3 | THE INTERNALIZED TRANS-GENERATIONAL VECTOR

In addition to the day-to-day parental influences upon the developing child, which are internalized and processed, there is also, within a culture or society, an internalization of those aspects that the society holds dear as defining and binding for each member of that large group. Some of these are passed on to subsequent generations as subconscious collective values, which the parents have themselves internalized, and some are transmitted to the child through stories, books, and media. A particular subset of such values that needs to be incorporated into this model is the "large group identity" with specific regard to chosen trauma and chosen glories.

Part of the internalized introject of, and later identification with, the caregiver includes those elements that the parents have themselves internalized that allow them to see themselves as part of the large group to which they belong. This may be a religious group, a national identity, a cultural subgroup, or other internalized structure that allows for identification and security within the large group. An important element of trans-generationally transmitted national identity is what has been described as "nationally chosen trauma."

Volkan (2005) has defined the chosen trauma as “the mental representation of an event that has caused a large group to face drastic losses, feel helpless and victimized by another group, and share a humiliating injury." Of course, the chosen trauma is not a conscious "choice" but rather one that "reflects the traumatized past generation's incapacity for or dealing with mourning losses connected to the shared traumatic event, as well as its failure to reverse the injury to the group's self-esteem ('narcissistic injury') and humiliation inflicted by another large group, usually a geographical neighbor" (Volkan, 2005).

The trauma is "chosen" partly because it is so powerful and so extensive, either in reality or psychologically, that it colors and flavors the identity of that national group for that generation. It becomes intertwined with who they are at that time in their national existence. Of significant importance in the earlier description of nationally chosen trauma is the implication of passing on the unresolved narcissistic injury to the next generation both as part of the national identity and also as the unconscious wish to have the next generation resolve it.
Equally important for the purposes of this paper is the potential for a chosen trauma to create a responsive, exaggerated entitlement ideology. Entitlement ideologies are “... connected with the large group’s difficulty mourning losses, people, land, or prestige at the hands of an enemy in the name of large-group identity” (Volkan, 2009 p. 212). The exaggerated entitlement can be described as a large-group belief system, and a renewed sense of omnipotence, that asserts “a shared sense of entitlement to recover what has been lost” (Volkan, 2009), and that the large group has a right to own what they wish to have. That is, when the large group is traumatized so severely it will unconsciously (as well as consciously – particularly in early generations) directly influence the next generation as to how to respond to the representations of the trauma, particularly continuing or completing the previous generations’ mourning and dealing with the shame and helplessness associated to the event.

We will now look to the experiences of the early European settlers to the Americas for insight into a powerful organizing "national trauma." While it is beyond the scope of this paper to elaborate all of the details, as well as the devastating impact on American Indians, it is considered that specific, crushing traumata to the first generations of American settlers served as both a seminal national chosen trauma, as well as fertile ground for the growth of an exaggerated entitlement response (that literally guided a nation). It also helped launch the gun as an iconic object in our national lore.

Significantly, most Americans recall the story of our settlers as The Pilgrims: sturdy individuals seeking religious freedom and making alliances with “strange” others (Indians) in order to learn how to work the land and survive. Our national holiday, Thanksgiving, features stories of bountiful food and the giving of thanks. The first settlers, however, that arrived in 1607 had frequent fights with the much stronger Powhatan Indians. Over 60% of Jamestown’s initial population was dead within a year due to the harsh conditions. By 1609 to 1610 their numbers had been decimated through starvation, disease, and Indian attacks. They were trading valuable items for meager amounts of food. Settlers had resorted to eating horses, rats, leather, and even cannibalism (Stromberg, 2013). In fear and defeat they decided in 1610 to abandon their site. They set sail, but their ship was turned back when Lord De La Warre arrived from England and serendipitously intercepted them on the James River. He had arrived with supplies as well as a large group of armed men. De La Warre and his forces mounted counter-offenses and eventually defeated the Powhatan after three wars. Subsequently, when the future colonists arrived in Plymouth in 1620 they formed an early alliance with the Wampanoag Indian tribe. The alliance was partly due to the Wampanoag believing the colonists had powerful weapons and could help them against their rival tribe the Narragansett (Sultzman, ).

Contrary to the sanitized version of Thanksgiving all did not remain peaceful between the settlers and the Indians. In 1622 the Powhatan attacked the Virginia settlements, killing 350–400 people, or 25% of the population. In 1675, the King Philip’s War (significantly, not at the forefront of most Americans minds) left 5000 people dead, three quarters of them Indians and one quarter settlers. As a percent of population this war was twice as costly as the Civil War and seven times as costly as World War II! Of 90 settlements in New England, 13 were destroyed and 52 damaged. English expansion in New England was halted for 50 years, and the frontier was a barren wasteland (Small Planet Communities, ). Significantly, unlike most other memorialized battles, there is little overt memory of this war’s cost in our national story or in most Americans’ individual memory.

The settlers’ near extinction, under such extreme and gruesome conditions would serve as an organizing trauma that would certainly have affected every person in the beginning cohort of the future generations of Americans. Yet shame, humiliation, and trauma might have helped keep it more suppressed than other more victorious and less shameful struggles. Still, it would have been something that would have to be passed on consciously and verbally to other generations as a warning or to foster preparedness, as well as an explanation of what had happened to their forebears. The scope, scale, and time-span of such widespread trauma and loss would be ideal to spawn a “national chosen trauma” to be passed on trans-generationally.

With regard to firearms, the perception was that the arrival of superior firearms turned the tide of destruction. It is suggested that for one object – the firearm – to turn such a devastating tide could bring a diffuse search for a salvation icon into laser-focus. The gun would be seen as an equalizer, a life-saver, and a sword of salvation. (In reality, the guns at the time were probably NOT technologically deserving of such deification (Chaplain, 2003)). It is further suggested that this was the start of the gun’s privileged and special place in America.
An important compensatory aspect of the perceived victimization of the chosen trauma is the "entitlement ideology." The settlers' traumatic experience would lend itself to the development of an exaggerated entitlement. That is, for subsequent generations to both avenge what had happened to their forebears and to take back what they believe belonged to them. While there are many examples of this in American shared cultural lore, perhaps the most clear and potent would be the concept of manifest destiny, which was highly influential and woven throughout our country's birth and early development. Manifest destiny is best described as "... the belief that the US was a chosen land that had been allotted the entire North American continent by God ... to expand its territory over the whole of North America and to extend and enhance its political, social, and economic influences" (dictionary.com/browse/manifest-destiny). In 1776 Thomas Paine framed the issues of manifest destiny as the American right and imperative to take and recover America. He imbued that frame with religious and moral authority. One example was Paine's references to John Winthrop's 1630 "city upon a hill" (with its own references back to the Sermon on the Mount). Especially clear was Paine's (1776 p. 26) statement that "We have it in our power to begin the world over again. A situation, similar to the present, hath not happened since the days of Noah until now." As Paine's statement reveals, much of the moral imperative in Western society and certainly the United States is traced back to the theology of the Abrahamic religions. This strong religious moral imperative, interwoven into the concept of manifest destiny, and imbued with a trans-generational, internalized national entitlement ideology, may serve to imbue the impulse of righting perceived serious wrongs by violent and extreme retribution as countenanced by divine right.

Significantly, most cultural stories and lore, translated to family tales and tradition, are told to young children, and as such are internalized with an infantile understanding of such stories. These internalized representations are internalized often just as the child reaches the developmental age when he or she can begin the process of mentalizing. The object of these stories may be superficially represented as the dangerously marginalized and outnumbered hero with a high moral purpose. Over generations this becomes periodically reinforced with victor-revised stories/fables/morals such as the pilgrims, the Revolutionary war, the Alamo, the cowboy settling the West, the Ayn Rand captain of industry, Navy SEALs, such fictional characters as the Lone Ranger, Rambo, and others. The caricatured representations of these heroic images resonate with the infantile introjects of the aforementioned trans-generational entitlement and chosen trauma.

These developmentally early influences of the cultural and social surround become internalized and, like most early introjects, are woven in to the developing character of the young large-group member. They become internal trans-generationally derived forces that shape and direct the identity of self, the gun-object, and the meaning of certain gun usage.

4 | THE EXTERNAL VECTOR - THE ACTIVE SOCIAL SURROUND

The model presented here requires that the dynamics of the society around the individual be examined. As described previously, members of a large group or society are influenced by the social structure around them. Initially, there are large group influences (such as morals, values, lore, etc.) that are internalized during early development. Later, there are constant, tremendous social forces brought to bear on individuals through media, social interactions and cultural expectations. Some of these later social forces resonate with earlier internalized social norms and expectations. This resonance may be experienced as either ego-syntonic or ego-dystonic. Acknowledging this continued, near-constant active influence of the social surround upon individuals belonging to their society, the said society will be referred to as the "active social surround." This active social surround has thus far been overlooked in its role in the active shooter event, as well as other forms of gun violence.

The active influence of the social surround on the future active shooter occurs on two levels. The first is internalized during early child development as discussed earlier. The later, crucial influence of the active social surround on the future active shooter is external. It is usually media driven, acute, and in real time. This is the permissive, encouraging role of society in the bystander/audience role. This societal role, not unlike the role of bystanders involved in school bullying (Twemlow, Fonagy, & Sacco, 2004), encourages and helps create context, meaning, and encouragement for the future shooter, and creates what will be called the "Active Social Context".
Most of the models of human interaction, including violent interaction, have been dyadic models. The phenomenon of the active shooter, and perhaps other large-scale violence, cannot be understood by merely looking at the victim and the perpetrator. To best understand gun violence in the United States, particularly the active shooter, we must change our understanding of the shooter event from a dyadic model (shooter–victim), to a triadic model (shooter–victim–society). This is the dynamic social system that the victim and shooter are part of while the rest of the society acts as potential or real onlookers. I believe the social surround is not just passive in this triad, but plays a very active role.

Over the past 20 years we have seen an extraordinary expansion of news dissemination. Media outlets have expanded, as have social media. News and events are now relayed almost instantaneously, often raw and unprocessed. Shocking or violent events reach nationwide and worldwide audiences within minutes. Most importantly, acts of gun violence are often followed non-stop for days by media and social media (as examples: Sandy Hook, Columbine High School, Boston Marathon Bombing, Dorner in Los Angeles, Fort Hood, Virginia Tech, etc.). The wall-to-wall media coverage of such events includes supposed experts discussing the perpetrator at length with presumed motivations or discovered manifestoes. Social media promote debates including defenders and sympathizers for the shooter and/or his message (i.e. Christopher Dorner: Cop-Killer or Martyr? Huffington Post, posted: February 11, 2013, 12:51 p.m. EST).

As a society and as individuals, we watch this coverage for days and sometimes weeks on end and talk about it over dinner tables and office desks. Media outlets show every aspect they can uncover of the event, the victims, and the perpetrators.

One would superficially assume that this exposure would be ego-dystonic and that most viewers would react with horror and distress. For some members of society this is true. For the majority, as evidenced by television ratings and trends, there is a voyeuristic fascination similar to bystanders at an accident or a fight. For almost all members of the active social surround, this will never lead to violence. However, for the future active shooter, one with a potential to regress and with a poor capacity to mentalize, this powerful social-surround influence is permissive, instructive, and persuasive. The rapt fascination, and continuous discussion and dissection of the events, and the shooter's possible motives, creates a massive audience for the event and a stable, rational, extraordinarily interested forum for the shooter and his fantasized message. The atmosphere, unintended as it may be, takes on a Roman coliseum, sporting event, or game-like quality (think of the play-by-play video of the search for Dorner, or the Boston Marathon bombers). For the future active shooter this context would be ego-syntonic, whether in real time, or later as a subconscious memory, when in the regressed, pre-mentalizing state of mind – that is, in the "psychic equivalent," or "pretend" mode. For this exceedingly small group of people, this ready and willing audience and its projected attention and perceived enthusiasm is both permissive and encouraging, and possibly necessary, for many acts of gun violence.

5 | SUMMARY

It is significant that elements of a large group's identifying characteristics, a national chosen trauma, and the culturally specific compensatory entitlement are consciously and unconsciously passed on to the developing child. These generational traumas and their sequelae are internalized and are as vulnerable to developmental and environmental vicissitudes as any other internalized constructs. Here we can begin to see the potential path for an individual with a poor capacity for mentalizing who regresses under serious stress, particularly with a perceived threat or fear of abandonment or annihilation, to resonate with and organize around those early introjected images of the desperate, lone, outnumbered and unwanted individual facing the enemy-other with high moral purpose and imperative. Within this internalized schema might be the heroic image of the gun as both an equalizer and a tool to achieve that high purpose.

Of critical importance in this model is the regression by the individual to an earlier, more primitive stage of mentalizing where the earlier-described internal construction is taking place, and is being acted upon with a
developmental state of mind that predates the unification of "pretend mode" and "psychic equivalence mode", as well as the development of accurate, reflective resonance with reality. That is, in that state of mind – developmentally approximately two to four years old – the "rules of the game" exist within the individual and are devoid of reality-based correction. There would not be accurate or internally-modifying recognition or resonance with others' affect, nor an ability to internalize accurate meaning of others' intent. Once this regressed, more primitive state of mind is operative, and the belief is that "the other or others" have harmed the individual or part of a system he cares about, that regressed individual will act on those beliefs, not unlike a three-year-old in "pretend mode". Additionally, an individual operating in this mode may have a self-perceived, idiosyncratically developed moral imperative that, from the "psychic equivalence" mode of operating, would be perceived, or felt, as a direct replica of reality and truth for others as well as for themselves. It would thus stand to reason that whatever actions they took in order to further the higher moral imperative – from their perspective – are justified, and would feel that others in the surround would agree and support those actions. This would include, like a child playing "war games", heroically killing as many enemies as possible. The "psychic equivalence" and "pretend" modes allow and facilitate the formation and enactment of otherwise forbidden actions in the service of revenge or idealized moral righteousness and entitlement and the social surround may be felt as a massive admiring audience.

Additionally, operating at this more infantile and primitive level of mentalizing or pre-mentalizing decreases or eliminates a true capacity for empathy toward those now determined to be "the enemy." Extrapolating from Akimitsuki and Decety's (2009) work, the regressed individual, operating in "pretend" mode, would have a very different internal context for his actions, as well as deficits in specific "empathy" neural pathway development. This would lead to severely reduced empathy for others' pain resulting from his actions.

Also, if operating at this regressed level, the individual would not empathically perceive an "other" in the environment with equal agency. Extrapolating further from Akimitsuki and Decety (2009), this may decrease, in real time, activation of areas in the brain that would engage appropriate social interaction and empathetic emotion regulation.

The regression to this level of pre-mentalizing not only impacts the individual's actions toward others but also to himself. This may help explain why most active shooters have no plan for escape and have no internal plans for themselves after the event. This would parallel a child playing a "pretend game" in which fantastic things can occur without constraint of reality, including the death of imaginary enemies or themselves. When the game is over the events and consequences of that game disappear, not unlike being on the holodeck of the Starship Enterprise in Star Trek.1

While I believe the Tri-Vector model of gun violence is heuristically satisfying, its greatest benefit will be in decreasing future gun violence, particularly future active shooter events, gang related deaths, and possibly domestic murders. This could be accomplished by intervening in any or all of the three vectors described here.

It would appear to be a very difficult undertaking to change the influence of the active social surround in the entire United States. Twemlow, Fonagy, Sacco, Vernberg, and Malcom (2011) report using psychoanalytically informed interventions derived from attachment theory and mentalizing models in a historically violent Jamaican school. Twemlow and Sacco (2013) outline the shift from a dyadic to a triadic model to understand and intervene in school bullying, resulting in remarkable success decreasing such aggression even in severely entrenched violent systems. Such elucidation of theory and technique used to intervene and change the bystander group process and social system dynamics could be applied it to the larger US cultural active social surround. Through education and consultation it may be possible to slowly change the media's treatment of violence. Harder still, but crucially important, is raising the public's awareness of its encouraging role in its triadic relationship with gun violence.

A far easier task, and one with ancillary benefits, is to intervene in the Tri-Vector model at the developmental level. There are currently instruments and standardized evaluative observation tools used to assess empathy and mentalizing. Creating and utilizing a program – not unlike President John Kennedy's program for youth physical fitness – to evaluate young children's developmental progress toward stable, robust mentalizing capacity may allow us to
identify children in need of help before they are marginalized or socially lost. If mentalizing can be improved early, a small amount of attention from a teacher, parent, or other significant person in the child’s life may improve their future, as well as decrease the pool of future violent actors. Secondary benefits of such a program may include early identification of other problems of development and attachment, such as abuse, neglect at home, bullying, malnutrition, and more. Aside from potentially decreasing future violent actors such a program may benefit the emotional health of future generations of Americans. A program that could increase empathy, mentalizing, and attachment, may improve the well-being of individuals, couples, and large group systems. Blakemore, den Ouden, Choudury, and Frith (2007) have demonstrated plasticity from adolescence to adulthood in the neural circuitry utilized for thinking about intention and causality. Thus, such programs and interventions would not need to be limited to young children.

As we continue to witness the weekly accounts of gun violence and active shooter scenarios we will continue to hear vague but heated calls to focus on mental health. The Tri-Vector model allows a deeper understanding of the multilayered, complex forces that influence all individuals in American culture regarding gun violence. It also offers an especially useful understanding with regard to the extremely rare, regressed individual who will become the next active shooter. This understanding can be utilized to decrease the pool whence active shooters arise, and to anticipate and prevent future active shooters.

NOTES

1 In the science fiction series Star Trek, the holodeck is “a specially outfitted but otherwise empty room, (that) can create both ‘solid’ props and characters as well as holographic background to evoke any vista, any scenario, and any personality – all based on whatever real or fictional parameters are programmed’, that disappears after the program is stopped or paused. From Star Trek website: www.startrek.com/database_article/holodeck

REFERENCES


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