Michael Grevera

Department of Anthropology

Bloomsburg University

Children of Terrorism: Examining the Psychological Effects of 9/11 on American Youth

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

This paper considers the effects that exposure to the terrorist attacks on 9/11 may have had on the enculturation process and psychological wellbeing of young Americans. Through the use of psychological testing and the examination of personal narratives acquired through interviewing, this research specifically examines the implications of both indirect exposure to the terrorist violence on 9/11 and continued exposure to yearly 9/11 memorials. The sample consisted of 539 participants, 529 of whom completed the psychological instrument “The Impact of Event Scale – Revised” (IES-R), and 10 shared personal narratives that focused on their memories of the attacks when they were children. All of the participants were between the ages of 18-23 during the time of data collection, placing them between the ages 8-13 at the time of the attacks. Final data analysis showed that 91 participants (17.20%) scored 24 or higher on the IES-R suggesting that posttraumatic stress is a clinical concern, and of the 91 participants who scored 24 or above: 56 scored “mild” (10.59%), 13 scored “moderate” (2.46%), and 22 scored “high” (4.16%). Additionally the personal narratives revealed several overlapping themes in the interviews including: vivid recollection of the event, vague explanations from adults as to what had transpired, and critical (and sometimes racist) responses to the attacks from parents. These findings suggest that the terrorist violence carried out on 9/11 had a profound impact on the psychological wellbeing and enculturation process of those exposed, and continued research addressing such effects is essential.

Keywords: [Posttraumatic stress reactions, 9/11, terrorism, children]

*“The pain comes from knowing that we have never been safe, and therefore will never be safe again. It comes from knowing we can never be so ignorant again. It comes from knowing we can never be children again. Losing innocence. Remembering heaven. That was the essence of hell.” –John Jakes*

The terrorist attacks carried out on September 11th 2001 were the largest anthropogenic tragedy faced by the United States in over half a century. These attacks touched the lives of nearly every American citizen and since have become a permanent fixture in American politics, media, and everyday culture. In total, they claimed over 3,000 lives and left a nation in disbelief and terror. While the most obvious impact to many individuals may have been the physical damage that occurred on 9/11, what is less apparent and what has received diminishing attention over the years, is the degree to which these events affected the psychological development and the enculturation process of millions of young Americans.

 In what Fairbrother et al. (2003) refer to as psychological sequels, the American public writ large experienced these devastating attacks repeatedly through various media outlets for weeks after the tragic event. Nearly every television station had around-the-clock news segments involving either Flight 77 claiming the western portion of the Pentagon in Washington D.C., accounts of Flight 93 crashing into a field in Stony Creek Township, Pennsylvania, or, possibly the most visceral, the 110 story twin towers completely collapsing after two Boeing 767s struck the towers only minutes apart. And while media exposure has dramatically decreased over the years, memorials honoring the victims of this tragedy have become a permanent fixture in American culture (Spigel, 2004).

When children grow up during a time period personified by war and fear, exposure to violence, or the threat of violence, becomes embedded in their everyday culture (Korbin, 2003). Over the past decade, it has become commonplace for the media to display the terrorist threat level, flash numbers indicating the ever rising civilian and military body count, or various other graphic and violent depictions of war, almost daily (Spigel, 2004). Children are subsequently exposed to the “normal abnormality” of violence, and are then forced to develop within its contexts (McIntyre, 2000). Many are unknowingly being enculturated through exposure to psychosocial trauma and as much as any parent may wish to shield their child or children from this, the level of exposure makes it nearly impossible to do so (Osofsky, 1999). The innocence of many children lies in the aftermath of a national tragedy and after ten years and two wars, it is clear that American culture is forever changed.

**Literature**

In order to develop a baseline understanding of the potential psychological effects of adolescent exposure to the terrorist attacks on 9/11, we critically reviewed past and current research based on the examination of such effects, and their cultural implications. The following sections will critically address the subjectivity of psychological testing; discuss the role that direct and indirect exposure to the terrorist attacks on 9/11 had in promoting post-traumatic stress in children; the effects 9/11 had on the enculturation of American youth; and finally, the role parental response has had on youth and subsequently, the expression of trauma after exposure to the terrorist attacks of 9/11.

***Subjectivity of psychological testing***

One thing that cannot be overlooked is the innate subjectivity of psychological testing, as well as the various ways that post-traumatic stress symptoms can be expressed. Because of this, it is very important to critically view PTSD testing and documentation procedures, especially when reviewing research regarding child populations. Although the traumatic stress elicited due to exposure to the terrorist attacks of 9/11 –either directly or indirectly– is significant (Otto et al. 2007, Fairbrother et al. 2003) they can be subjective and documented with error (Litz and Keane 1989, Danckwerts and Leathem 2003).

***Direct exposure***

Fairbrother et al. (2003) conducted a study four months after September 11th in which they assessed the prevalence of post-traumatic stress reactions in children that had resided in New York City at the time of the study. The study utilized a sample that consisted of 434 boys and girls ages 14-17 and were directly exposed[[1]](#endnote-1) to the terrorist attacks. The researchers administered the University of California, Los Angeles (UCLA) Post Traumatic Stress Disorder Reaction Index –Child revision (PTSDRI-CR) to all participants. The PTSDRI-CR consists of 20 questions with three factors emphasized: re-experiencing/numbing, fear/anxiety, and concentration/sleep. The research concluded that the majority of the sample (62%) displayed “moderate” levels of Post-Traumatic Stress Responses (PTSR), 21% displayed “mild” or “doubtful’ levels of PTSR, and 17% of the sample displayed “severe” or “very severe” levels of PTSR. The study isolated specific factors such as repeated media exposure, locality (especially in Manhattan), and children viewing highly emotional parental reaction to the crisis were associated with severe levels of PTSR (Fairbrother et al. 2003).

***Indirect exposure***

Otto M.W. et al. (2007) conducted a study that examined the impact of indirect exposure[[2]](#endnote-2) to the terrorist attacks of 9/11 through media coverage. They assessed 166 boys and girls ages seven to 15 from the Boston area for symptoms consistent with post-traumatic stress. The researchers identified post-traumatic stress symptoms using the informants’ responses to the Child PTSD Symptom Assessment (CPTSDA) that was administered. The parameters that the CPTSDA used to determine levels of PTSD symptoms were based on 17 questions that were itemized around three key factors: re-experiencing, avoidance and arousal. Additionally, they examined the viewing habits in regards to the 9/11 media coverage. They found a correlation between the amounts of media coverage exposure and PTSD symptoms. The results also revealed that the majority of the sample (76%) displayed little to no overt symptoms of PTSD, 19% had symptoms, but not enough for an official diagnosis, and 5% of the sample was comprised of children with symptoms consistent with the diagnosis of PTSD (Otto et al. 2007). It is important to note that even though the minority (5%) of the sample elicited symptoms consistent with a diagnosis for PTSD, that that percentage accounts for 8.3 children out of 166 and in addition to that, 31.5 children out of 166 displayed symptoms of PTSD, though not significant enough for diagnosis.

***Parental impact***

Wilson A.C. et al. (date) examined the role that parent’s reactions and parenting styles may have on the level of traumatic stress associated to 9/11s terrorist attacks. The study utilized a sample of male and female children age nine to 13, and included their parents. The participants were recruited through a larger study they were currently participating in, thus giving the researchers access to data collected post-9/11 including information on maternal depression, maternal parenting (acceptance/rejection and consistent discipline), and information obtained from the Child Behavior Checklist. Children were interviewed within one month of 9/11, and their parents were surveyed to identify different strategies that they employed to help their children understand and cope with this traumatic event. The results revealed pre-9/11 child problems to be a significant predictor of functional impairment[[3]](#endnote-3) and a negative correlation between high levels of mother-reported helpfulness and low levels of traumatic stress symptoms. Also, an interaction effect was found between pre-9/11 maternal acceptance and child negative emotionality in regard to predicting traumatic stress symptoms. The study concluded that the way parents react to traumatic events has a significant role in the level of traumatic stress their children may experience in response to the event (Wilson et al.).

***Social Influences***

In regard to the various post-9/11 cultural changes that emerged within the United States, Anna Richman Berisin (2001) wrote:

September 11 created a genre of folk games that have never been recorded before, and, unfortunately, new folk groups: September 11 victims, heroes, frightened travelers, those labeled "terrorists," panicked city dwellers (Berisin 2001:Page number)…

Within her article, she explores the role that play and games have in adolescent children’s methods of coping with traumatic events, specifically with the terrorist attacks on 9/11. She used ethnographic observation techniques to gather data from various children at play and observed how they employed varied expressions of folklore to potentially understand, as well as cope with, their traumatic exposure.

 They recorded several accounts of play that reflected the terrorist attacks, and occasionally play depicting violence as well. One example noted was the modification of a children’s folk song London Bridge (is falling down) by seven and nine year old male children on a playground in intercity Philadelphia, PA (Berisin 2001). Traditionally the song is sung syntactically as “London Bridge is falling down. Falling down, falling down. London Bridge is falling down, my fair lady” (Opie and Opie 1997). However the children used “World Trade Center” as a modifier for “London Bridge” and sang “World Trade Center is falling down. Falling down, falling down. World Trade center is falling down. Oh –on top of us.” Additionally, she noted a modification of play wherein children would traditionally assume the roles of “Cops and Robbers” or “Superhero and Villain” (traditional good guy versus bad guy play). However, she documents a new variation of this with “Americans versus Terrorists” and traditional play of Superheroes, but the super villain was now broadly and nontraditionally defined as “Terrorist.” She also noted “a ten-year-old girl pretended to be a soldier which, has rarely been recorded in students' fieldwork.” As she herself states “collections of children's folklore have always served as a window into the anxieties and ambivalence concerning specific wars and tragedies” (Berisin 2001) but, due to the nature and scope of exposure to the terrorist violence of 9/11 and the subsequent reminders of said event, this questions arises: when one looks through this window now, what do they see?

 The analysis of the above literature allowed us to incorporate research that is currently being conducted, or had been conducted, into our own research. Comprehension of the current research surrounding the cultural and psychological impact that the terrorist attacks on 9/11 is paramount in the process of understanding the future implications of such a tragic and complex event and laid the foundation for our own research.

**Method**

The methods utilized for this study consisted of both quasi-experimental and experimental research methodology. This included qualitative and quantitative assessment instruments, utilizing interviews and a questionnaire that included a psychological test. In addition, the library-based component is drawn from the online and campus resources of the Andruss Library of Bloomsburg University. Details noted below:

***Sample***

 A convenience sample was drawn from the Bloomsburg University student population and included 634 participants. Inclusion criteria consisted of two key elements: participants had to be between the ages 18 and 23, who had been indirectly exposed to the terrorist attacks of 9/11 during their early childhood. Of the 634 participants, 624 participants completed the survey and psychological test, and ten students participated in semi-structured interviews.

|  |  |
| --- | --- |
| Total sample (N):  | 634 |
| Completed the questionnaire:  | 624 |
| Met the inclusion criteria: | 529

|  |
| --- |
| 339 Female (64%) |
| 190 Men (36%) |

 |
| Participated in semi-structured interviews: | 10

|  |
| --- |
| 5 Female (50%) |
| 5 Male (50%) |

  |
| Age (number of participants):  | 18 (139)19 (188)20 (122)21 (56)22 (24) |
| Age (M): | 19.32 |

However, of the 624 participants who completed the survey and psychological test, only 529

met the inclusion criteria. Those who met the inclusion criteria included 339 women (64%) and 190 men (36%). This included 98 male students (19%) and 155 (29%) female students approximately seven months prior to the 10th Anniversary of 9/11, and then 184 female students (35%) and 92 male students (17%) within one week after the 10th Anniversary of 9/11.

***Quantitative Research Methods***

The data were collected during two periods: six months prior to the 10th Anniversary memorial of 9/11 and within one week after. This particular method of data collection was employed in order to ascertain a mean level of trauma before, and then after, the 10th anniversary of the terrorist attacks of 9/11. This was done so in order to do a comparative analysis between the two time periods. Though the data were collected in two specific time frames, it was also compiled together to develop a baseline for event related traumatic stress experienced collectively by the participants.

***Questionnaire***

 Surveys were administered that included qualifier questions to determine if the participant’s exposure to the terrorist attacks was direct or indirect, and if they met the studies age criteria (18-23). In order to determine whether the participant’s exposure was direct or indirect, participants were asked:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| “Which of the following best describes how you became aware of the 9/11 attacks?”

|  |
| --- |
|  a. I saw them live, on television, as they happened (not prerecorded) |
|  b. I did not see the events live on television, but I heard about the events as they happened at school  |
|  c. I did not hear about the events until I came home from school |
|  d. I did not learn of the event until at least 24 hours later |
|  e. None of the above |

 |

The structure of this question allowed me to determine whether the exposure to the terrorist violence on 9/11 was indirect or direct. Subsequently, any participants who did not meet the age criteria or had direct exposure to the event were removed prior to data analysis.

***Instrument***

 The Impact of Event Scale Revised (IES-R) is a self-report inventory. Within the context of this study it was not used as diagnostic tool for PTSD rather, it is designed to measure the subjective response to a specific traumatic event (Christianson and Marren 2008). While the IES-R is one of the most widely used self report measures within trauma literature (J. Gayle Beck et al., 2009), an obvious shortcoming to using the IES-R is that it has a design emphasis considering ageing populations. However, I strongly weighed the pros and cons of using the IES-R and after careful consideration and critical review of the questions, I decided it was the optimal choice. The IES-R allowed me to not only quantify the level of traumatic stress each participant had due to indirect exposure to 9/11, but also allowed me to do a chronological comparison by administering it six months prior to the tenth anniversary of the 9/11 attacks, and again within one week after. The IES-R consists of 22 closed-ended questions designed to obtain an overall subjective score. The IES-R also determines an intrusion mean (8 items), avoidance mean (6 items), and hyperarousal mean (8 items). Item Response Anchors are: A = Not at all; B = A little bit; C = Moderately; D = Quite a bit; E = Extremely. Therefore, the IES-R has a scoring range of 0 to 32 for intrusion, 0 to 20 for hyperarousal, 0 to 32 for avoidance and 0 to 88 for an overall score. For individuals who scored 24-32 PTSD is a clinical concern (Neal et al., 1994); participants who scored 33 – 36 meet the cutoff score for a probable diagnosis of PTSD (Creamer & Falilla, 2002); and participants who scored 37 or more may be expiring traumatic stress that is high enough to suppress their immune system (Kawamura, Yoshiharu, & Nozomu, 2001).

***Qualitative Research Methods***

 Much of the data was obtained through qualitative methods. However, we also felt it necessary to collect qualitative data in order to gain individual perspective on key topics including, but not limited to: adult reactions (relatives and teachers), level of understanding during and after the attacks, memory, and the general impact on culture. Ten respondents participated in semi-structures interviewing. Each interview was approximately 30-45 minutes in duration and consisted of 12 open-ended questions minimally. The interviews were designed to probe for personal narratives surrounding the events September 11, 2001. Each interview was transcribed with the permission of the participants in order to ensure accuracy during data collection.

1. Direct exposure was on the basis of informants living or going to school in close proximity to the World Trade Center and/or witnessing the terrorist attacks first hand (Fairbrother et al. 2003). [↑](#endnote-ref-1)
2. Indirect exposure was on the basis of informants not living or going to school in close proximity to the World Trade Center and/or did not witness the terrorist attacks first hand (Otto et al. 2007). [↑](#endnote-ref-2)
3. Functional impairment refers to limitations due to the illness, as people with a disease may not carry out certain functions in their daily lives (Üstün and Kennedy 2009). [↑](#endnote-ref-3)