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Why Children Don't Belong on the Battlefield

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Abstract

While it is known that children are more vulnerable to developing posttraumatic stress disorder (PTSD) than adults, the reason for this vulnerability is still not fully understood. This paper examines findings of previous studies and presents an argument for a cognitive vulnerability in children. The cognitive limitations of children – less intelligence, education and cognitive control – may place them at greater risk for PTSD than adults by impairing cognitive forms of coping, such as appraisal-focused coping. This deficiency in cognitive coping may also cause a common feature of childhood PTSD; dissociation. The role the parent plays in prevention and treatment is also discussed, as well as possible venues of future study.

A soldier comes back from serving in a war for six months. He has killed men and has seen his friends die. His life has not been easy, but he is home. Doctors say he is shaken, but in fair physical and mental health. The story is different for a boy who spent a week in that same war. He no longer laughs, and stays home from school to avoid other students. He has trouble falling asleep, and when he does he is plagued by nightmares. The boy has posttraumatic stress disorder (PTSD) (American Psychiatric Association, 2000). Why was this boy so damaged while the soldier who spent months fighting had fair health? Something about the child made him more vulnerable to PTSD, and likewise, something about the soldier protected him (Murphy, 2002). This hypothetical scenario illustrates a consistent finding; children are more vulnerable to developing PTSD than adults following a traumatic event (Kaplow, Dodge, Amaya-Jackson, & Saxe, 2005; Murphy, 2002). This paper will contrast the unique cognitive vulnerabilities of children relative to adults, the relationship between these cognitive factors and the behavioural limitations, why such vulnerabilities exist, and the typical methods children employ in order to cope with their traumatic experiences.

Cognitive Factors

Intelligence and Education

It is consistently found that greater IQ (Hoaken, 2012) and education (Barlow, Durand & Stewart, 2012) serve as protective factors from PTSD. This is partly due to less intelligent soldiers being more likely to engage in risky behaviour (Barlow et al., 2012; Macklin, Metzger, Litz, McNally, Lasko, Orr, & Pitman, 1998). However, this is likely not the only reason intelligence is protective. A study of war veterans found that lower pre-combat intelligence scores on the Armed Forces Qualification Test – administered before enlistment - was predictive of a greater likelihood of a PTSD diagnosis (Macklin et al., 1998). This relationship was

One proposed explanation for these findings is the more intelligent individuals may simply know coping methods that less intelligent individuals are unaware of (Macklin et al., 1998), are more capable of engaging in available coping methods (Macklin et al., 1998), or their education provided them with experience coping with stressful events (Lequerica, Forchheimer, Albright, Tate, Duggan, & Rahman, 2010).

Having less education or less intelligence may also impair an individual's appraisal of available coping options, as well as make them less capable of engaging in appraisal-focused coping (Weiten, Dunn, Hammer, 2012), which involves engaging in cognitive reappraisal (Lazarus & Folkman, 1984). Cognitive reappraisal means to subjectively evaluate the circumstances of a situation in a way to alter one's emotional response (Richard, 2003). Cognitive reappraisal has been shown to be an effective coping strategy, as demonstrated in one study which found individuals were able to significantly reduce stress activation while watching a video of a ritualistic circumcision by thinking of the event not as something brutal, but instead an exploration of exotic cultures (Kaplan, 2005).

All of these factors – intelligence, education, and cognitive reappraisal - are crucial when coping with stressful events (Macklin et al., 1998; Neufelf & Randolph, 1989). They also require use of cognitive resources, which may be problematic for less intelligent individuals with fewer resources, who may be more vulnerable to PTSD as a result (Neufeld, 1990; Neufeld & Randolph, 1989). This hypothesis was supported in a study by Thompson and Gottesman (2008), who found that when veterans were exposed to less combat (i.e., less stress), those with higher intelligence fared better, showing less combat-related PTSD than those with lower intelligence. However, at greater combat exposure levels, there was no difference in the frequency of PTSD

between higher and lower intelligence individuals (Thompson & Gottesman, 2008). This interaction suggests that the benefits offered by intelligence were exhausted by the greater trauma, and thus were no longer protective.

It is therefore not difficult to see why children would fare worse with trauma than adults. Adults have lived longer, are more educated, and have more experience dealing with stress (Murphy, 2002). However, another factor which may be more significant than intelligence or education is cognitive control (Bomyea et al., 2012).

Cognitive Control

Cognitive control is the processes that guide one's perceptual attention to a stimulus or stimulus feature, and is especially important when overcoming distracting or contradictory information (Diamond, 2002). Cognitive control is a protracted developmental process, not reaching maturity until young adulthood (Diamond, 2002). This is interesting as those with PTSD tend to have less cognitive control than healthy controls (Bomyea, Amir, & Lang, 2012). It was also discovered that childhood ADHD (a disorder characterized by low cognitive control) (American Psychiatric Association, 2000) was predictive of development of adult-onset PTSD in war veterans (Adler, Kunz, Chua, Rotrosen, & Resnick, 2004). A powerful example of the role cognitive control plays in PTSD comes from a study by Bomyea et al. (2012). Participants with a history of PTSD symptoms verified whether or not a series of mathematical equations were correct, while keeping in mind a sequence of letters (sequences ranged between two to six letters). As sequence length increased, greater demands were placed on the cognitive control of participants. They found that soldiers who demonstrated worse task performance (i.e., less cognitive control) also endorsed more PTSD symptoms than those with better task performance. Thus it can be seen that lower intelligence, education, and cognitive control in children can lead

to vulnerability to PTSD, though the question remains as to how they cause this vulnerability.

One explanation involves the coping methods most frequently employed when dealing with PTSD. A study by Amir and colleagues (1997) found that PTSD patients prefer using one particular coping strategy, suppression, to inhibit intrusive thoughts or emotions of the trauma. This is an inefficient coping strategy when dealing with large stressors, requiring large amounts of cognitive control to effectively suppress the traumatic event (Amir et al., 1997). This may explain why individuals with low cognitive control, such as children, are so vulnerable to developing PTSD. Having less cognitive control, they are less capable of suppressing negative thoughts and emotions (Bomyea et al., 2012). Yet, despite their lack of cognitive control children frequently engage in suppression (Kaplow et al., 2005), while still exhibiting re-experiencing symptoms at a level comparable to adults (Murphy, 2002), among other negative outcomes in youth (Kaplow et al., 2005). One must wonder why such coping methods are so readily invoked by children if they are so inefficient and maladaptive in the long-term. The answer may come from how dissociation is adaptive.

Emotional Coping

Dissociation

To a child, avoiding or suppressing the problem may appear to be the best option. Children, being less independent, are not as well-equipped to deal with trauma as adults. In other words, a child is not only less capable of engaging in appraisal-focused coping, but also less capable of problem-focused coping (Taylor, 1999). A child in such a situation, unable to resolve the problem or cognitively adaptively assimilate the events, may instead resort emotionally-focused coping (Weiten et al., 2012). Often this manifests as dissociation – mentally removing oneself from the situation (Lyons, 1987, as cited in Murphy, 2002; McLewin & Muller, 2006).

Dissociation is common in children with PTSD (Murphy, 2002), particularly in long-term physical and sexual abuse (Kaplow, 2005; Scharz & Kowalski, 1991), and is considered characteristic of childhood PTSD (Kaplow et al., 2005; Murphy, 2002). A study by Murphy (2002) of children and adults with PTSD found that children displayed more dissociative symptoms than adults, even when controlling for level of abuse. Dissociation has also been found to be the strongest predictor of PTSD in children following trauma (Kaplow et al., 2005).

In children, this increased tendency to dissociate is very problematic and may manifest itself in unfortunate and disturbing ways. Terr (1991) describes the case of a 7-year-old boy, Frederick, who for a year was violently abused by his stepfather. Frederick would retreat into a happy memory for the duration of the abuse, feeling no pain during this time. Eventually this was automatic; he would find himself bleeding and incapable of feeling the injury. There are many other ways children may dissociate (Taylor, 1999). These dissociations are associated with detrimental long-term outcomes, but can be adaptive in the short-term. Frederick, for example, was unable to feel the pain during the abuse (Terr, 1991).

This paper is not the first to suggest that poor cognitive coping – particularly cognitive reappraisal – may cause dissociation in children (Murphy, 2002). It has also been proposed that dissociative responses may impair cognitive coping by preventing the expression of emotions and cognitions of the trauma, which may worsen PTSD (Kaplow et al., 2005). Children may therefore be in a vicious cycle of poor cognitive coping and dissociation, exacerbating their PTSD. What hope does a child have if their coping methods only make it worse?

Parents may help the child through the trauma. Parental support has been found to be a protective factor for children following exposure to trauma (Thabet, Ibraheem, Shivram, Winter, Vostanis, 2009), possibly by overcoming the cognitive limitations of their children and helping

them to cognitively cope with the trauma. This may be done by providing aid in cognitive appraisal (Thabet et al., 2009). Unfortunately, many parents have trouble accepting that their child has been traumatized, and feel anxious at the thought. Children may pick up on parental anxiety and dissociate so as to not upset the parents (Pynos et al., 1987, as cited in Murphy, 2002, p. 68). To properly help their children overcome their limitations in coping with traumatic experiences, parents must face the damage that has been done.

Conclusions and Future Directions

The literature provided demonstrates a strong case for the cognitive limitations of children being responsible for their vulnerability to developing PTSD compared to adult. Children are unable to evaluate the situation, assess their options or engage in cognitive reappraisal. This may put them at greater risk for PTSD and may even be a chief cause in their frequent manifestation of dissociative symptoms (Murphy, 2002). However, more research must be done before solid conclusions can be drawn. One interesting avenue to explore is congruency of PTSD symptomatology between children and adults with cognitive impairments, such as ADHD. If the vulnerabilities of children are due to poorer education or cognitive control, a greater congruency should be expected between children and impaired adults compared to children and normal adults.

We should also consider marking children with cognitive impairments who have undergone traumatic experiences as “at risk”. Special considerations are already in place for traumatized children (Kaplow et al., 2005), but if the reason for their elevated risk is their level of cognitive functioning, those cognitively impaired may be more likely to develop PTSD than their peers of the same age.

We must also not understate the importance of supportive parenting. This too is already

emphasized, but the nature of the role that they play is still not fully understood. More needs to be done to increase the involvement of parents in the lives of traumatized youth (Birmes et al., 2009; Thabet et al., 2009). Children are still new to the world. We, as grown-ups, must show them that it is not a horrible place to live.

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