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When Angels Fall From the Sky

Helping Children and Young People Cope in the Aftermath of a Disaster

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Abstract

It is estimated that children represent nearly two thirds of people who suffer from the effects of disaster worldwide. These figures do not include man-made catastrophe, war or terrorism and have the potential to cause severe disruption for up to 225 million children and young people during 2017, many of whom are likely to need practical and emotional support to aid recovery.

Given the complex and unique needs of children and young people who have experienced trauma, it is said that emergency management professionals can often lack the skills and experience to provide appropriate support. This, combined with the limited ability of youth to articulate the need for help, leaves children and young people vulnerable to physical and emotional problems at a later stage of life.

Using empirical research, this paper has developed guidance from which emergency management professionals are able to provide youth-focussed support for children and young people who have experienced disaster. It considers factors linked to the development of Post-Traumatic Stress Disorder (PTSD) in children and young people, including gender, socio-economic background and cumulative vulnerability as indicators to a PTSD or Acute Stress Disorder diagnosis.

The research focusses upon the contributions of youth, highlighting the ability for children and young people to help themselves and others during a crisis, often undertaking duties which would have been assumed by their parents or other adult caregivers. Whilst it is argued that children and young people have the capacity to undertake adult roles and responsibilities, the effects of adult-morphism are considered within the paper, outlining the reasons why youth should not be spoken for as ‘little adults’, and assumed to be capable of responding to trauma in much the same way as adults.

A series of recommendations and support tools are also included within the paper to help responders and caregivers identify emergent issues and support interventions for children and young people who have not experienced ‘natural recovery’.

The paper concludes that it is essential for responders to include children and young people as integral actors to the emergency management process, recognising both their unique vulnerabilities and the invaluable contribution that they are able to make.

When Angels Fall From the Sky: Helping Children and Young People Cope in the Aftermath of a Disaster

Introduction

It has long been recognised that adults who have been caught up in disaster can suffer from adverse psychological effects which are now diagnosed, in some cases, as Post Traumatic Stress Disorder (PTSD). At any one time, it is estimated that one percent of the adult population suffer from PTSD (Kinchen, 1994), the recovery from which is determined by the degree of support that victims receive (Scott and Palmer, 2000). Less is known, however, about the effects that traumatic events have on children and young people[1] and the success of interventions to support their recovery. This lack of focus may, in part, be due to a child's developmental status and limited ability to recognise the root causes of distress, their lack of knowledge on how to seek help and the common assumption that disasters do not effect children and young people to the same extent as adults (La Greca et al. 2002).

Yet according to UNICEF's climate change report of 2014, children represent 50-60% of all people hit by natural disaster with figures set to double every twelve years (UNICEF, 2014). Oxfam also highlight a severe picture within their annual report of 2010-2011 stating that within five years, the devastating consequences of climate related disaster would affect around 375 million people (Oxfam, 2011). These figures, which exclude the effects of man-made catastrophe, war or terrorism, outline the potential for up to 225 million children and young people worldwide to be dealing with the effects of disaster by end 2016.

With regard to the psychological effects of disaster on youth, research has found that many children and young people suffer with the effects of PTSD, yet few studies have sort to establish whether their ability to cope with day to day life was impaired (La Greca, Silverman, Vernerg and Roberts, 2002). Vincent (1997) also supports the findings of children and young people suffering from PTSD, reporting that of those who presented with moderate to severe symptoms in the 10 months following

[1] For the purpose of this paper, and in line with General Medical Council guidance, children will be considered as those who are not yet able to make cognisant decisions when faced with complex or traumatic events. Young people are to be considered as older children who have the maturity and understanding to make informed choices, based upon their surroundings and the information they receive (GMC: 2016).

Hurricane Andrew[2] 40% met the criteria for a PTSD diagnosis nearly four years later.

Given that PTSD can effect adults, children and young people, Scott and Palmer (2000) researched the similarities between adult and youth reactions to trauma, stating that in the absence of intervention, all present with similar psychological effects which can cause ongoing and significant distress relating to family, social and work related environments. Furthermore, McFarlane (1987) highlighted a link between the recovery prospects for children and young people and their parents' response to traumatic events, explaining that with less experience of the world, youth often take emotional cues from parents or guardians. This, combined with the tendency for grown-ups to speak on behalf of children (La Greca et al., 2002), gives rise to potential misrepresentation when considering children and young people's needs for recovery.

Despite the large number of children and young people potentially exposed to disaster, their vulnerability to PTSD and limited ability to seek help, crisis management professionals often lack the knowledge that is required to provide youth-focussed emergency planning and management activity (Anderson, 2005). This may be as a result of children and young people being viewed from an 'adultmorphic' perspective (Ollendick and Herson, 1989), considered to be able to cope with crisis in much the same way as grown-ups and thus not requiring youth-focussed support.

Additionally, teachers and caregivers may be unaware of how a child's mood and concentration may be affected by trauma (Keppel-Benson, 1992; Yule and Williams, 1990) and may misinterpret a deterioration in behaviour and general disinterest in activities as non-compliance. With regard to younger children, Conway (1989) outlines frequent numbers of those suffering from development regression following disaster, highlighting examples of where children under the age of seven had forgotten basic skills such as feeding and toilet routines which, prior to the traumatic event, were well established practices.

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[2] Hurricane Andrew occurred in August 1992 and was the third strongest hurricane to affect America in 20th Century. Damage and destruction focussed on the Bahamas, Louisiana and Florida, reaching category 5 on the Simpson Hurricane Scale within 48 hours. 65 people were killed as a result of the disaster with 25,524 homes reported destroyed and 101, 241 reported damaged. The financial cost of Hurricane Andrew is estimated to be around 25 billion dollars (NHC: 1992).

These effects, combined with the limited ability for children and young people to recognise the root causes of their distress and tendency for adults to incorrectly assume that youth can simply 'bounce back' without support (Fothergill and Peek, 2015), leaves children and young people further disadvantaged when considering the requirement for assistance following a traumatic event.

Therefore, the purpose of this paper is to:

- Consider the findings of academics and practitioners who have worked with children and young people who have experienced trauma;
- Develop practical guidance from which emergency responders are able to develop effective support for children and young people who have been caught up in the aftermath of a disaster.

Children are not 'little adults'

The wake of any disaster, whether natural or man-made, can leave adults and their communities struggling to find a sense of equilibrium and thus a basis from which effective recovery can take place. Interventions, when set in place, may be tailored around only those who are *known* to the authorities to be vulnerable, leaving the remainder of the community to cope with a potentially uncertain future, relying upon little or no outside provision and support. Similar challenges may be found when trying to support those who suffer from undiagnosed PTSD, which can manifest itself in symptoms such as nightmares and sleep disturbances, increased vulnerability and the avoidance of intrusive thoughts and feelings associated with the event. Parkinson (1993) identified that such denial of feelings following trauma can be very strong and defence mechanisms in adults usually include statements of how help is not required because individuals are 'apparently' coping well. Yet, the debilitating effects of trauma have been recognised and documented for many years.

Terms such as shell shock, traumatic neurosis and nervous shock in adults have existed since the early 20th Century (Erichson, 1882; Trimble, 1985) and include symptoms such traumatic memory avoidance or 'numbing', flashbacks and hyperarousal when subjected to thoughts or conditions which resemble aspects of the event. With regard to children and young people, however, studies have found that flashback experiences occur less than with adults, (APA, 1987; Lyons, 1987)

and that children are more likely to demonstrate their traumatic memories through repetitive play (Terr, 1981). Likewise, when considering memory avoidance, studies have highlighted that many children and young people can relay their experience of trauma in great detail (Malmquist, 1986; Pynoos and Nader, 1989), cited in Conway Saylor (1993), as opposed to hiding their thoughts and feelings associated with the event.

However, not all children and young people are able to articulate their traumatic experience and need for support. With fewer life experiences and a tendency for parents to underestimate their needs (McFarlane, 1987), youth are often ill-prepared to manage their emotions and may consciously or unconsciously 'tune-out' or disassociate themselves from situations which cause pain. In addition, and as a result of witnessing the anxiety of loved ones who may also have been caught up in the disaster, children and young people may hide their true feelings in order to protect those closest to them. Such actions further complicate the ability for caregivers to identify and provide the correct intervention, thus increasing the chances of physical and emotional problems for youth at a later stage of life.

With regard to identifying the needs of youth Maslow (1943) identified a variance in the physical, emotional and psychosocial needs of adults, children and young people. This, combined with unequivocal differences in their cognition, gives reason to understand how children and young people progress to adulthood, deal with the effects of trauma and, in turn, how emergency responders are able to create a framework for youth-focussed support.

From infancy, individuals transition through a series of life lessons which are identified by Erikson (1959) as the nine stages of psychosocial development (see Appendix A). Each phase is age related and underpinned by questions relating to hope and trust, initiative and purpose, doubt, competency and inferiority, identity and isolation; all of which require close relationships with parents, family, school and peers to ensure positive outcomes. Erickson warns that phases that are not successfully completed as part of a healthy development process can re-surface as problems later in life and inhibit an individual's fulfilment of potential, stating:

> *"…those best equipped to resolve the crisis of early adulthood are those who have most successfully resolved the crisis of adolescence…"*

Whilst Erickson refers to a crisis of early adulthood in the context of the stress of developing into an adult, symptoms highlighted within his research include feeling lost, scared, lonely or confused. His work also identified isolation, unemployment, living in an unfamiliar environment and learning to cope without family support as contributory stressors to adulthood, all of which can be products of disaster. However, we cannot simple assume that the consequences of disaster are felt in the same way for adults as they are for youth as the comprehension of trauma may differ. Influential factors include the severity of the event, its scope of impact, duration and number of casualties incurred (Saylor, 1993). Furthermore, whilst adults, children and young people all require love, belonging and interaction with peers to maintain a sense of equilibrium (Maslow, 1943, 1954), youth also maintain an additional need to play and explore to ensure that their physical, cognitive and emotional health is maintained.

Maslow (1943, 1954) also identified within his theory of human motivation a significant need for adults to reach homeostasis, or physiological stability, despite the occurrence of disruptive imbalances. This state of equilibrium is required for all adults to fulfil their natural desire to meet a hierarchy of needs relating to security, physical provision and emotional wellbeing. Without such needs being met, Maslow (1943) writes that humans cannot function properly. Furthermore, and in relation to physical health and emotional stability, Maslow (1943) states:

> *"…In infants we can see a much more direct reaction to bodily illnesses of various kinds…which make the child look at the world in a whole different way. At such moments of pain, it may be postulated that, for the child, the appearance of the whole world suddenly changes from sunniness to darkness, so to speak, and becomes a place in which anything at all might happen, in which previously stable things have suddenly become unstable…"*

The Centers for Disease Control and Prevention (CDCP) concur with Maslow (1943), explaining that it is harder for children to establish a state of physical and emotional equilibrium. CDCP (2016) state that youth are more susceptible to bodily imbalance than adults in the aftermath of a disaster and, most specifically, that children breathe in more air per kilo of body weight, have thinner skin and, with less fluid in their bodies, suffer the effects of dehydration in a more severe manner. The National

Child Traumatic Stress Network (NCTSN)[3], also explain that children's immune and central nervous systems may not develop correctly if subjected to prolonged stressful environments. This is also the case for young people who, according to the NCTSN, frequently suffer from body dysregulation following trauma meaning that they over or under-respond to sensory stimuli (NCTSN, 2016)

Yet, despite the unique physical, emotional and developmental needs of children and young people caught up in disaster, research into vulnerability has tended to focus upon adults with a disability, suffering financial constraints or coming from an ethnic minority group (Fothergill and Peek, 2015); with age being considered in the context of the elderly rather than the young. Fothergill and Peek (2015) outline the importance of considering the vulnerability that exists as a result of youth and explain that disasters affect children and young people in different ways according to their age and developmental status, as follows;

> *"…Toddlers may have nightmares, refuse to sleep alone, and have temper tantrums. Adolescents and teens are more likely to engage in risky behaviours such as smoking or drinking after disaster, to develop eating and sleep disorders, and to be less interested in social activities at school..."*

The NCTSN (2016) concur with this, outlining more severe effects, stating;

> *"…Complexly traumatised children are more likely to engage in high-risk behaviours such as self-harm, unsafe sexual practices and excessive risk taking such as operating a vehicle at high speeds. They may also engage in illegal activities, such as alcohol and substance use, assaulting others, stealing, running away and/or prostitution, thereby making it more likely that they will enter the juvenile justice system…"*

Notwithstanding the immense personal impact of trauma on youth, the NCTSN also outline the longer term consequences of disaster on the capacity for healthcare provision, the economic impact on the criminal justice system and the potential for lost revenue due to reduced productivity in society. This adds credence to the need for understanding the root causes of distress in children and young people, the identification of underlying factors that may have existed prior to their trauma and the

[3] Established by US Congress in 2000, the NCTSN is a network funded by the American Centre for Mental Health Services, Substance Misuse and Mental Health Administration to focus on childhood trauma. The network brings together frontline services, researchers and families to raise the standard of care to children and young people and provide greater access to trauma support services.

cumulative effect that this may have on their ability to cope in the aftermath of a disaster. With regard to the collective effect of stress factors, Fothergill and Peek (2015) state;

> *"…The children [and young people] with the highest levels of cumulative vulnerability are at greatest risk for a range of negative psychological, physical and educational effects and have the hardest time rebounding from disaster..."*

Furthermore, and in relation to children's spheres of life which can be affected by trauma, Fothergill and Peek (2015) outlined variations in recovery success relating to family, housing, schools, peers, health and extra-curricular activities, dependent upon the effectiveness of pre and post-disaster support that was available to youth.

Overall, the physical, developmental and emotional needs of children and young people are complex and unique. This sets them apart from adults. Whilst both adults and youth suffer from similar symptoms of PTSD, they express their feelings and emotions differently, are more readily able to articulate their experiences in greater detail and, unlike adults, risk developmental regression if exposed to disaster at a young age. Whilst there is a window of opportunity for people to recover naturally from traumatic events, the success of overall recovery for the most vulnerable of society is largely dependent upon the accurate diagnosis of trauma, combined with the provision of focussed support. Children and young people should not be considered naïve to disasters and their effects and able to bounce back without support (Fothergill and Peek, 2015). Nor should they be spoken for as 'little adults', able to manage crisis much in the same way as grown-ups. Rather more, youth should be recognised as individuals who, given the correct intervention, are able to shape their own future in a healthy, inclusive and progressive manner. Guidance relating to the recovery of youth should, therefore, take into consideration the accurate diagnosis of PTSD or post-traumatic stress related disorder, the spheres of a child or young person's life which may be affected by the disaster and a 'measured' approach to the implementation of age-appropriate support.

Factors linked to the development of PTSD

The Diagnostic and Statistical Manual of Mental Health Disorders (APA, 1994) cited in Scott and Palmer (2000) highlights a number of factors that contribute to PTSD

and PTSD related symptoms. These symptoms are applicable to both adults and youth and include whether the individual has been exposed to a traumatic event in which there was there was a risk of serious injury, a perceived threat to or actual loss of life and an intense feeling of helplessness, fear or horror. These criteria act as a pre-curser or 'gateway' to PTSD and can lead to symptoms such as hyperarousal, intrusive thoughts and the avoidance of situations that bring back traumatic memories. Regarding symptoms that last for more than one month, the DSM-IV (APA, 1994) outlines a diagnosis of PTSD, highlighting the inability for individuals to function in work, social and other environments. Where patients present with the same symptoms but for periods of less than one month, demonstrating a greater level of 'natural recovery', a diagnosis of Acute Stress Disorder (ASD) is given.

Furthermore, and in relation to identifying the impact of trauma on young children, Michael Sheeringa (2010) developed a young child PTSD screening tool, enabling parents or caregivers to complete a simple questionnaire to identify PTSD symptoms in the aftermath of a traumatic event. The basis of the young child PTSD screen is to establish whether one or more symptoms is present in order to consider whether referral to professional support services is required. The questionnaire which is to be completed by a parent or caregiver is provided at Appendix B.

With regard to older children, Horowitz et al (1979) developed the CRIES-8 scale as a method to measure the scale of 'intrusion' or traumatic thoughts and subsequent 'avoidance' behaviours that may take place. The short questionnaire which can be observed at Appendix C is based upon comments made by people following stressful life events and asks for the older child or young person to tick each item showing how frequently these comments are true for them within a timeframe of the previous 7 days.

With regard to the accuracy of the CRIES-8 scale, analysis of data collected by the Children of War Foundation[4] (2016) and Yule (1997) established that of the children who scored 17 or more on the CRIES-8 questionnaire, fewer than 10% were misclassified as suffering from the effects of post-traumatic stress, arguably

[4] The Children of War Foundation have made the CRIES-8 documentation feely available to support Children and Young people across the world. In return, COWF ask that copies of results are made available to them in order that they can improve their work for youth. Information can be accessed via www.childrenofwar.org

confirming the scale's credibility in terms of its use for diagnosis.

Research into the ability to function in everyday life following exposure to a traumatic event highlighted that the vast majority of people who experience severe trauma *will* suffer from a short period of destabilisation but will naturally adopt coping mechanisms within a short period of time (Scott and Palmer, 2000). Furthermore, and in terms of the numbers of people affected by the period of destabilisation, Kessler et al (1996) highlight that at some point in life, around 75% of the population will experience an event which could act as a gateway to PTSD but only 7.5% of the population will develop the disorder. Whilst this, in part, may be due to a strong desire for victims to deny adverse feelings following trauma (Parkinson, 1993) and, thus, not present to a medical professional for diagnosis, it would be imprudent to assume that 67.5% of the population recovered simply as a result of their natural need for equilibrium. Cumulative stress factors including age, gender and socio-economic background may also affect the ability of individuals to adapt to and overcome trauma. In particular for children, the dependence upon others to provide the needs outlined by Maslow (1943, 1954) and Erikson (2001), creates the potential for a feeling of further instability.

Whilst Maslow focusses on adults within his hierarchy of needs pyramid which can be observed at Appendix D, similar principles may be applied to children and young people who, it can be argued, also require a fundamental level of physiological, safety and security and social needs to be met in before being able to realise their full potential.

Relating to the needs of children, Maslow (1943) writes:

> *"…Another indication of the child's need for safety is his preference for some kind of undisrupted routine or rhythm. He seems to want a predictable, orderly world. For instance, injustice, unfairness or inconsistency in the parents seems to make a child feel anxious and unsafe…"*

Both children and young people may find difficulty in conceptualising their experience after a traumatic event. Saylor (1993) highlights the influence that age can have on a child's interpretation of trauma, due to their stage of development, and how this can affect their ability to adapt coping mechanisms and articulate symptoms. Where young children have difficulty in adjusting to a traumatic

experience, coping mechanisms may include becoming anxious or withdrawn when separated from parents or caregivers. Fantasising about being rescued by a superhero or other powerful character who has arrived to ‘save the day’ is a common reaction (Scott and Palmer, 2000).

Older children and young people, however, have a tendency to present the more classic ‘gateway’ symptoms. These include intrusive thoughts, avoidance and hyperarousal (Eth and Pynoos, 1985), arguably giving rise to an easier diagnosis of PTSD or ASD. In either case, the ability to adapt to and overcome traumatic experience can be linked to the cognitive development of the individual concerned (Brown, 1999). It is this age-related factor that renders youth vulnerable when considering their ability to move from a psychological state of shock following trauma, to a more stable position whereby the event can be conceptualised as an unwanted but accepted life experience. Given the aforementioned challenges for youth adjusting from initial traumatic shock to acceptance and recovery, plans should include support to children and young people at the onset of an incident and not limited only to stages of recovery.

Why recovery is not an equal opportunity for youth

Research into the ability of youth to follow a steady trajectory towards a state of equilibrium has highlighted gender as a potential ‘disruptor’ to recovery. La Greca, Silverman et al. (2002) outline that girls are more likely to suffer from PTSD related symptoms than boys although research into this field of enquiry demonstrates mixed results, rendering its meaningfulness uncertain (Vernberg et al. 1996). Further research by La Greca, Silverman et al (2002), however, highlighted a tendency for boys to react to violent trauma by displaying aggressive behaviour. Girls, however, favoured avoidance as a coping strategy. La Greca, Silverman et al. (2002) argued that the latter coping strategy placed girls at greater risk of distress than boys, as a result of how they ‘internalise’ their emotions. Furthermore, interviews with children held hostage by Chechen separatists during the Beslan siege in September 2004 demonstrated similar reactions. They gave examples of a young boy expressing the desire to become an assassin in order to kill all terrorists, whilst an interview with a young girl highlighted her desire to become a carer and support those who were sad.

Gender specific activity was also reported by Fothergill and Peek (2015) in the

immediate aftermath of Hurricane Katrina with girls demonstrating a tendency to model their mothers by taking on roles such as feeding, cleaning and caring for the very young. Boys tended to undertake manual duties, outdoor work or playing sports which were considered more socially acceptable within the male arena. Given the suggestion that children and young people adopt gender–biased activity in the response to a disaster, consideration should be given to their capacity to provide support during periods of disruption. Plans should incorporate the views and suggestions of both male and female children and young people with support mechanisms being developed in advance of an incident.

Notwithstanding the notion that the above gender-specific activities may be influenced by adult cues or culturally acceptable behaviours, research has demonstrated differences in physical and psychosocial responses of girls' and boys' subjected to trauma. Arguably, these differences, howsoever caused, create unique gender vulnerabilities which may be linked to the National Trauma Stress Network's account of the effects of severely traumatise children engaging in 'internalising' behaviours such as self- harm, alcohol and substance misuse, or less restrained behaviours such as assaulting others, stealing and entering the juvenile justice system as a result of other forms of criminal activity. Given the severity of these consequences, caregivers should strongly consider the need for gender-focussed interventions within their planning arrangements to support youth recovery.

The capacity for children and young people to help themselves and others

Whilst it is argued that the physical and emotional status of children and young people places them at a disadvantage when dealing with the aftermath of a disaster, the capacity for youth to support themselves and others during times of distress may often be underestimated. Fothergill and Peek (2015) describe numerous accounts of where children and young people had encouraged, supported and led their parents or adult caregivers to safety, undertaking activities which, ordinarily, could be assumed only possible for those with greater life experience than that of youth.

In addition, and in relation to evacuation, many parents who experienced the events of Hurricane Katrina explained that they would not have left their homes if it were not for the need to protect their children (Fothergill and Peek, 2015) and would have remained in-situ for the most severe effects of the disaster, arguably adding further

casualties to those already sustained. Subconscious protection was also afforded to parents and adult caregivers in the form of the requirement for them to feed, change and care for very young children and babies who, without support, would have become neglected. Arguably, this requirement to maintain routine encouraged caregivers to move from an initial phase of shock into a more stabilised trajectory towards normality. The early introduction of routine, therefore, should be considered when developing recovery management plans.

With regard to older children, Fothergill and Peek (2015) describe accounts of rescues involving makeshift rafts being made by young people to float adults to safety. Youth were also observed supporting repatriation processes, using social media to reconnect adults who would otherwise have had to wait for more conventional means of connection via formal support services within the emergency assistance centres. Both examples provide evidence of youth working as integral actors within the disaster response and recovery process and should not be underestimated when developing emergency response and recovery arrangements.

Furthermore, and whilst children and young people may find difficulty in conceptualising the experience of a traumatic event, Fothergill and Peek highlight many accounts of youth providing emotional support to their parents, with young children offering ‘daily hugs’, drawings, songs and jokes, and older children frequently asking if adults needed ‘to talk’.

With regard to the different types of support offered by children and young people, UNICEF (2007) provide examples of where youth have supported response and recovery efforts, stating that when asking for support during the 2004 tsunami, young people often came forward whilst many adults stayed away. Moreover, when support workers were sent out to identify and support any psychological difficulties experienced by youth, they reported that young people could not be found within the villages as they were still out working, arguably reducing the time available to access appropriate support. Examples of support provided by children and young people in the aftermath of a disaster can be seen at Appendix E.

Given the essential work which is often undertaken by children and young people during and following a disaster, the ability for youth to support themselves, their parents and other victims of trauma, and the acceptance that the gateway criteria for

PTSD applies to both adults, children and young people, a strong argument exists for integrating children and young people within the emergency planning arrangements for response and recovery. UNICEF (2007) concur with this and in relation to the benefits of considering children and young people as integral actors to disaster management state;

> *"…Children and young people want to be involved. Part of the action helps them to feel valued and is an antidote to depression, frustration and boredom. It gives them something useful to do. Children's participation in relief, recovery and rehabilitation is considered one of the best therapies for dealing with traumatic events".*

Overall, the capacity for youth to support themselves and others is unequivocal. Yet, given the support and in some cases the lifesaving activity that is undertaken by children and young people caught up in disaster, it could be argued that youth still do not form an integral part of the disaster management and planning process.

Furthermore, and as highlighted within the findings of UNICEF (2007), the detrimental effect of trauma on youth may be alleviated by actively engaging children and young people in the process of disaster response and recovery, provided that appropriate activity and support is undertaken.

This process involves crisis management professionals working alongside youth in order to tailor activities to the needs of children and young people; supporting them to take ownership of appropriate aspects of their recovery.

Recommendations to help children and young people cope post-disaster

As has been described within this paper, adults, children and young people react to trauma in different ways. Whilst most will adopt natural coping mechanisms and begin the recovery process within a short period of time, sadly for others, difficulty in finding a state of equilibrium following the disruption of a disaster leaves them struggling to cope. For this reason, emergency planning processes should address the following, articulated in further detail at Appendix F:

- Early contact to identify practical and emotional support services which might be required;
- Methods of implementing youth-appropriate routine following a traumatic event;

- The potential for gender bias and the identification of a strategy to mitigate any adverse effects;
- Specific vulnerabilities, contextualised within a child or young person's sphere of life;
- Age appropriate screening to identify any psychological support requirements;
- Support to care givers to enable them to provide ongoing care.

Like adults, children and young people may also worry that they are 'losing their mind' as a result of being unable to make sense of the feelings and emotions associated with PSTD or ASD (Kinchin, 1998), adding further to the feeling of a loss of control which is often described by victims caught up in a disruptive event. It is recommended, therefore, that when developing a strategy of support for children and young people, the following is considered:

1. With regard to conceptualising the feelings and emotions associated with experiencing trauma, La Greca, Silverman et al. (2009) recommend **an integrated approach to supporting youth to move from a state of shock through to event acceptance and return to an accepted quality of life.** They highlight the value of the 'parent, teacher and child' approach to recovery. Arguably, this framework of support would create an environment in which the child or young person has a 'voice' and is able to take ownership of appropriate aspects of their own recovery, with parents or adult caregivers able to support the process within the home environment and the continuity of care extending to the education arena.

2. Furthermore, with regard to the ways in which children and young people can be supported within the family, school and peer group environment, Fothergill and Peek (2015) explain that given the correct resources and support, **families are often best placed to offer assistance to children and young people.** Basic needs include confirmation of the whereabouts of and communication with family and care givers, recognition of all family members (in the case of split relationships), reinstatement of routine wherever possible and an understanding that additional crisis may be being felt within the family environment such as divorce, death and unemployment. These may contribute to the cumulative vulnerability of the child or young person

concerned.

3. In relation to the school environment, Fothergill and Peek (2015) outline the importance of providing teaching staff with the training required to support students who have been effected by disaster, with ongoing assistance to them to enable this process. Moreover, the benefits of returning to school routine may also include the provision of emotional support for students via peer led groups, access to professional counselling services, the re-integration of children and young people to the classroom, with familiar faces, to reduce the feeling of isolation; and the implementation of therapy projects to allow youth to help both themselves and others to cope with the aftermath of a disaster.

4. Fothergill and Peek (2015) also explain that all of the children interviewed following Hurricane Katrina articulated how much it meant to them to meet back up with friends and participate in activities that were commonplace prior to the storm. Recommendations made as a result of the interviews included **helping children to reconnect with their friends and peer groups as soon as possible following a disaster, recognising that there was also a bond created by victims of disaster.** Efforts should be made to maintain communications within those 'communities of circumstance' as part of the recovery process, supporting children and young people to cope with the loss of old friends and encouraging them to participate in extracurricular activities where possible.

5. With regard to supporting those who have suffered trauma and loss, Kinchen and Brown (2001) highlight that whilst life will never be the same for those caught up in a disaster, survival is about returning to an accepted quality of life and understanding that **the stages of recovery from a psychological illness do not follow typical recovery periods associated with physical injury.**

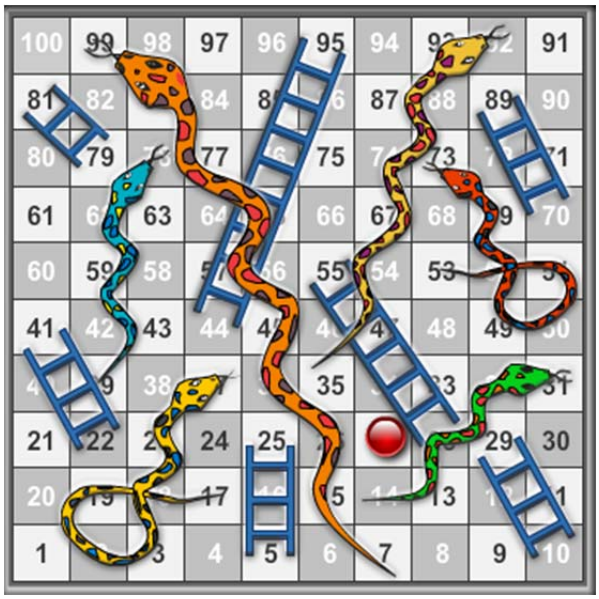
Some similarities between physical and psychological injury are, however, described by Kinchen (1998) who explains that both types of injury can leave permanent scarring on the individual. Furthermore, and in relation to following a steady trajectory towards recovery, Kinchen (1994, 1998) metaphorically describes that sufferers of PTSD may feel as though they are caught on a board of snakes and

ladders, with ladders helping them along the road to recovery and snakes pulling them back to the state of trauma caused by the initial disruptive event. Examples of ladders are described by Kinchen (1994, 1998) as appropriately prescribed medication, holistic therapy, relaxation techniques and individual group support. 'Snakes' are described by Kinchen (1994, 1998) as panic attacks, depression, anniversaries, alcohol or non-prescribed drug use, adverse publicity or the inability to accept PTSD or ASD as a diagnosis as a result of 'stigma'. Overall, and when supporting both children and young people, Kinchen and Brown (2001) explain that the snakes and ladders recovery model is best applied because;

> *'…it allows for the oscillations in recovery described by Horowitz (1979), is easy to comprehend since almost everyone has some knowledge of snakes and ladders, the process of recovery is easily explained; and although the snakes and ladders model appears to be very simple, it [the model] also demonstrates the complexity of PTSD, allowing for the extremes of the disorder.'*

An example of the board game described by Kinchen (1994, 1998) can be seen in fig 1.

Fig 1 - Snakes and ladders model of recovery



Conclusion

The pathway to recovery for children and young people who have been caught up in disaster is complex and arguably different to that of adults. Care needs to be

specifically focussed on the needs of youth and include a range of support services and expertise to ensure a steady trajectory towards recovery.

In addition to identifying the impact of trauma on youth, by using tools such as the young child PTSD screen developed by Scheeringa (2010) and CRIES-8, developed by Horowitz et al (1979), parents, teachers, medical professionals and emergency responders should consider the recommendations proposed in Appendix F when developing their emergency management plans.

In summary, research has demonstrated that given the correct care and integration within the disaster management arena, children and young people can provide effective and in some cases life-saving support to themselves and others. Whilst Kinchen and Brown (2001) highlight that life will never be the same for those caught up in disaster, returning to an accepted quality of life is, arguably, a tangible goal which can be met by children and young people. This is provided that they are appropriately integrated and supported within emergency management processes.

Whilst it is recognised that children and young people do not always have the capability to identify and articulate the need for help, the tendency for adult-morphism to take place increases the chances of misrepresentation when considering the support requirements for youth. It is recommended, therefore, that a combination of assessment tools such as the CRIES-8 and Young Children's PTSD screen, professional medical care, consultation with children and young people and ongoing support from teachers, parents and caregivers is most effective when tailoring support to youth.

Moreover, research has suggested that the vast majority of people, children and adults alike, will suffer from a period of de-stabilisation following exposure to a traumatic event. This disruption will naturally subside for most but for those who require support, Kinchen's snakes and ladders model of recovery provides an easy to comprehend pathway for children and young people to articulate their journey to an accepted quality of life, allowing for the oscillations of effect that are likely to be caused by PTSD.

Overall, the ability of children and young people to support themselves and others in the aftermath of a disaster is testament to the skills, strength of character and tenacity of youth. Regardless of their complex and unique vulnerabilities, children

and young people have continuously demonstrated their capability as integral actors within the emergency management arena, a resource which is often underestimated by emergency planning practitioners. In order to build upon the resilience of communities, responders should seek to include children and young people within their emergency preparedness arrangements and recognise that the support that adult caregivers are able to give a child or young person at their greatest time of need is key to demining a strong and successful society of the future.

Appendices

Appendix A Erikson's Eight Stages of Psychosocial Development

Appendix B Young Child PTSD Screening Tool

Appendix C Children's Impact of Events Scale (CRIES-8)

Appendix D Maslow's Hierarchy of Needs Pyramid

Appendix E Examples of Support offered by Children and Young People in the aftermath of a disaster

Appendix F Incorporating youth-focussed support within local emergency planning arrangements

Appendix A

Erikson stages of psychosocial development

Approximate Age	Virtues	Psychosocial crisis	Significant relationship	Existential question	Examples
Infancy 0-1 year	**Hope**	**Basic trust vs. mistrust**	**Mother**	**Can I trust the world?**	**Feeding, abandonment**
Early childhood 1-3 years	Will	Autonomy vs. shame and doubt	Parents	Is it ok to be me?	Toilet training, clothing themselves
Pre-School 3 – 6 years	Purpose	Initiative vs. guilt	Family	Is it ok for me to do, move and act?	Exploring, using tools or making art
School 6 – 12 years	Competence	Industry vs. inferiority	Neighbours, school	Can I make it in the world of people and things?	School, sports
Adolescence 13 – 19 years	Fidelity	Identity vs. role confusion	Peers, role, model	Who am I? Who can I be?	Social relationships
Early Adulthood 20 – 39 years	Love	Intimacy vs. isolation	Friends, partners	Can I love?	Romantic relationships
Adulthood 40-64 years	Care	Generativity vs. stagnation	Household, workmates	Can I make my life count?	Work, parenthood
Maturity 65 – death	Wisdom	Ego integrity vs. despair	Mankind, my kind	Is it ok to have been me?	Reflection on life

Appendix B

Young Child PTSD Screening Tool

Parent: Below is a list of symptoms that children can have after life threatening event. Circle the number (0-2) that best describes how often the symptom has bothered your child in the last 2 weeks.

Name: ID: Date:

Write down the details of the life-threatening traumatic event(s):			
	(0) No	(1) A little	(2) A lot
Does your child have intrusive memories of the trauma(s)? Does s/he bring the subject up on his/her own?	0	1	2
Is your child having more nightmares since the trauma(s) occurred?	0	1	2
Does s/he get upset when exposed to reminders of the event(s)? E.g. a child who was in a car crash might be nervous while riding in a car now. Or a child who saw domestic violence might be nervous when other people argue.	0	1	2
Has your child become more irritable, had outbursts of anger or developed extreme temper tantrums since the trauma(s)?	0	1	2
Does your child startle more easily than before the trauma(s)? E.g. if there's a loud noise or someone sneaks up behind him/her, does/he jump or seem startled?	0	1	2

Results:

Two symptoms endorsements (either 1 or 2) is considered a positive screen and should be referred for further investigation. One symptom endorsed (either 1 or 2) should be considered marginally positive and further testing undertaken as a minimum.

Appendix C

Children's Impact of Events Scale (CRIES-8)

Name: Date:

Within the last 7 days:		Not at all	Rarely	Sometimes	Often
1.	Do you think about it even when you don't mean to?				
2.	Do you try to remove it from your memory?				
3.	Do you have waves of strong feelings about it?				
4.	Do you stay away from reminders about it? (e.g. places or situations)				
5.	Do you try not to talk about it?				
6.	Do pictures it pop into your mind?				
7.	Do other things keep making you think about it?				
8.	Do you try not to think about it?				

Results:

Each question is scored on a 4 point scale as follows:

Not at all = 0

Rarely = 1

Sometimes = 3

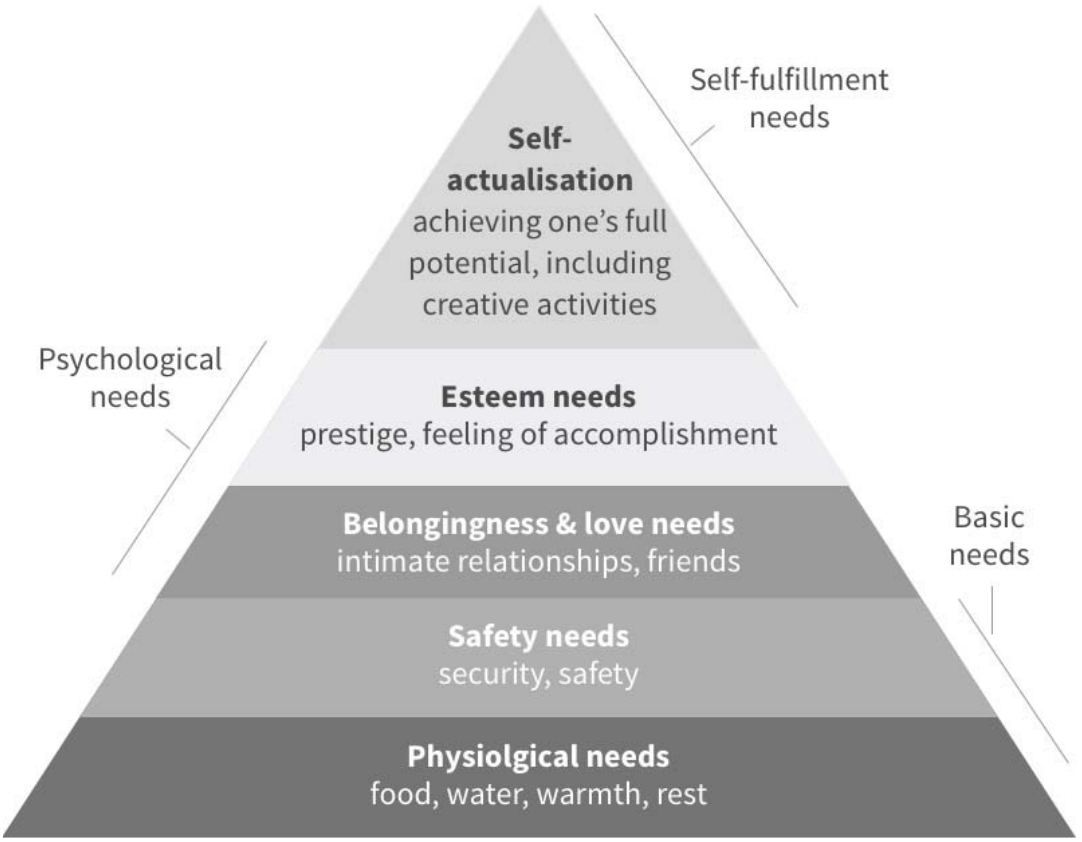
Often = 5

Within the scoring system there are two sub-scales relating to 'intrusion' (the sum of questions 1+3+6+7) and 'avoidance' (the sum of questions 2+4+5+8).

A maximum total combined score of 40.

Appendix D

Maslow's Hierarchy of Needs Pyramid



Appendix E

Examples of support provided by children and young people

<table>
<tr>
<td>Children aged 5 – 10 years
Making toys for younger children</td>
<td rowspan="2">Children aged 12 – 17 years
Rescuing and saving younger children
Caring for younger children
Teaching younger children and peers
Treating wounds and caring for injured people
Clearing up after an emergency
Collecting bodies
Helping to trace families
Helping old people to collect food and rations
Helping families with small children to collect food and rations
Packing food for distribution
Providing information about milk powder needs
Cleaning camps
Cleaning and painting buildings
Developing businesses</td>
</tr>
<tr>
<td>Children aged 9-12 years
Providing first aid
Playing and supporting children who lost family members
Talking with and supporting friends who were sad
Collecting food and rations for old people
Helping prepare food
Helping to clean Internally Displaced People camps
Making representation to adults</td>
</tr>
<tr>
<td>Children aged 12 years
Teaching younger children
Caring for younger children
Working as part of an emergency task group</td>
<td>Young people aged 18 years and older
Rescuing and saving younger children
Organising entertainment
Developing businesses
Providing community communications
Negotiating with outsiders on behalf of a community</td>
</tr>
</table>

Appendix F

Incorporating youth-focussed support within local emergency planning arrangements

	Consideration	Recommendation
1	Have the needs of children and young people been considered within the present emergency planning arrangements for your area / organisation?	All emergency plans should include the needs of children and young people when considering vulnerability. Consultation should take place, where possible, with children and young people to establish the types of support that they may require. This support can then be incorporated within emergency plans alongside guidance from teachers, medical practitioners, social care professionals and charity organisation with specific subject matter expertise.
2	What consideration has been given to the early implementation of routine to support youth in the transition from traumatic shock to a more stabilised trajectory towards recovery?	Plans should consider the need for basic daily routines to be established as soon as is reasonably practicable following a disaster. In particular, Emergency Assistance Centre staff should anticipate the need for youth focussed activities to support physical and emotional wellbeing, and for smaller children, facilities that will help to break boredom. Children and young people can also help to plan for emergencies by packing a grab bag which can be stored at home in preparation for evacuation. Items such as toys, games, refreshments, colouring books and pencils are often observed being packed by children, providing the opportunity for discussions over *'what to do in the event of…'* between children, young people, parents and caregivers. For children between the age of 9 and 11 years, the British Red Cross are piloting a 'Pillowcase project'. This programme uses similar principles to the grab bag exercise but incorporates 'coping skills' training to give confidence in the event of children and young people having to deal with an emergency.
3	As integral actors to the field of emergency management, what roles could children and young people adopt in support of their own and others recovery? Has gender-bias been considered and supported appropriately within the role identification?	UNICEF have recorded many examples of where children and young people have provided support to themselves and others during and following disaster. Some of the skills sets observed during response and recovery are practiced by youth groups such the St John Ambulance, Scouts and Guides, Army and Air Force cadets and those undertaking the Duke of Edinburgh Award scheme. Consultation with these groups may provide the opportunity for emergency planning practitioners, children and young people to understand the capability and requirements of youth during a disaster.

4	What vulnerabilities can be identified for children and young people residing within the area, including any transient communities? What support should be made available?	Consultation with parents and caregivers, children and young people, teaching staff, medical practitioners, social care professionals and charitable organisations should take place to identify potential areas of vulnerability when planning to support youth in the aftermath of a disaster. In addition, an assessment of the cumulative effect of age, gender and socio-economic background should be undertaken when developing recovery strategies, considering the need to support family stability, housing, school activities, peer group interaction, health and extra-curricular activities.
5	How will consultation take place between stakeholders (including children and young people) prior to, during and after a traumatic event to ensure the needs of youth are met?	A structured framework for emergency planning, response and recovery is laid out within the UK Government's Concept of Operations document for emergency management. Whilst the present structure considers the responsibilities of the emergency services and non-emergency service organisations such as utility companies and the voluntary sector, reference to children and young people as integral actors in the field of emergency management does not occur. To that end, planners should seek to incorporate the views and suggestions of children and young people by using structures such as the aforementioned youth groups, engaging with school projects and / or facilitating workshops as part of a wider community engagement strategy. Engagement should also take the form of the teacher-child-parent relationship which is considered most effective when tailoring support requirements to youth during recovery.
6	What screening methods are being used to identify whether a child or young person requires psychological support?	The teacher-child-parent relationship provides an integrated approach to supporting children and young people in the aftermath of disaster. This relationship should be set up as soon as is reasonably practicable following the onset of a disruptive event. Likewise, tools such as the CRIES-8 questionnaire and the Young Child PTSD Screen provide a useful frame of reference to identify the need for further psychological support. It is recommended that these templates are incorporated within emergency management.
7	What support should be given to teachers, parents and caregivers to develop a consistent and progressive return to an accepted quality of life for children and young people who have been caught up in disaster?	In order for teachers and caregivers to provide the best possible support to children and young people, guidance and support will be required both prior to and following a disaster. Engagement in emergency planning activities such as grab-bag training sessions, community project work and multi-agency exercises are essential to raise awareness of the needs and capabilities of youth and likewise, to highlight the areas in which adult caregivers may need support. This may include basic psychological support training such as mental health first aid and practical support such as affordable child care provision, negotiations over flexible working hours and the invocation of support groups for carers of those caught up in a traumatic event. In the event of an incident, all stakeholders involved in supporting the recovery of children and young people should communicate on a regular basis to ensure consistency in their approach to support.

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