**The Impact of Immersion in Outdoor Environments and Activity Camps on Young people – By Caron Gaisford**

**Introduction**

Young people today face a wider variety of challenges to their wellbeing than ever before. Even for those who come from nurturing and secure families, the challenges faced whilst growing up can be daunting. For vulnerable young people there are so many more pressures and challenges to overcome. Developmental and life course studies on adolescents reveal that experiences in adolescence influence adulthood, with positive peer relationships affecting subsequent relationships and parenting styles, political and social beliefs affecting behaviour in adulthood (Benson JE. 2011) (The LiFe Study 2017).

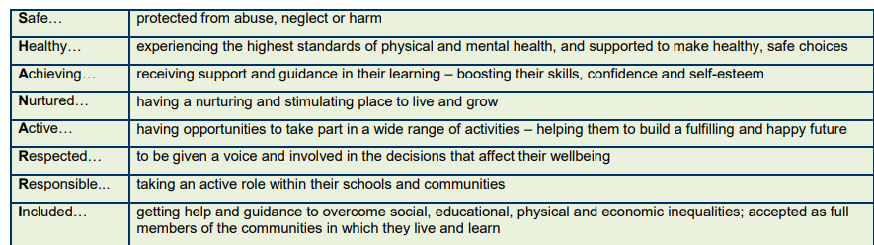
In 2015, a Public Health England report stated that the majority of mental health issues start in childhood or adolescence and continue into adulthood. They highlighted the importance of the 10 to 20 age bracket as being a time fraught with risks to young people’s mental health (Public Health England 2015). This report stated that it is time to focus on protective factors around young peoples’ wellbeing, supporting them to enable them to develop a positive outlook on life, healthy behaviours which in turn will aid achievement in and out of school and in their future lives as adults.

Health and wellbeing encompass a positive physical, social and mental state. It is not just the absence of pain, discomfort and incapacity but it requires that basic needs are met, that individuals have a sense of purpose, and that they feel able to achieve important personal goals and participate in society (Moss S 2012) (NHS 2016). This can be successfully achieved by building social and emotional competencies such as resilience, self-esteem and interpersonal skills.

For adults it is stated that wellbeing is enhanced by conditions that include supportive personal relationships, strong and inclusive communities, good health, financial and personal security, rewarding employment and a healthy and attractive environment. (DEFRA 2011) (Moss S 2012) (NHS 2016). There are a range of assessments available within the health professions to identify issues in adults reporting low well-being, however there is less consensus of how to measure wellbeing from a child’s perspective (Reaut G 2008) (Conti G 2014).

In 2015, a National policy framework report to promote children's wellbeing in Scotland (Getting it right for every child, GIRFEC) defined wellbeing in young people using 8 factors (termed the SHANARRI well-being indicators) (Table 1). This report, produced as a result of the Children and Young people Scotland Act 2015, stated that all children should be safe, healthy, active, nurtured, achieving, respected, responsible, and feel included (Coles E 2016).

**Table 1. SHANARRI well-being indicators**



In this report it is highlighted that resilience, alongside mental toughness is linked under the umbrella of “ well-being” and GIRFEC use the outcome of a SHANARRI questionnaire alongside the

resilience matrix and a wellness triangle (termed My World) to help determine the vulnerability of each child and to direct support where needed. (Appendix 1).

The New Economics Foundation (NEF) highlight five key evidence-based actions to improve wellbeing; these are connecting, being active, giving, taking notice/ being aware, keeping learning/ being challenged (New Economics Foundation 2008).

**Resilience** is widely defined as the ability to bounce back from setbacks, traumatic events and disappointment (Kaplan, 1999; Ungar, Dumond, & McDonald, 2005). Adapted from the Positive Youth foundation, Ginsburg, a paediatric psychologist, identified seven C’s of resilience as Control; Competence; Coping; Confidence; Connection; Character and Contribution (Ginsberg KR 2011).

*'The development of resiliency is none other than the process of healthy human development.'* (Bonnie B 2005)

Resilience is similar to other psychological phenomena such as hardiness (Bartone, 1999; Golby & Sheard, 2004), mental toughness (Clough, Earle, & Sewell, 2002; Loehr, 1986), and dispositional optimism (Scheier & Carver, 1985; Sheard & Golby, 2006**).** Mental toughness, however, is more than just resilience, it is defined as resilience with confidence (Strycharczyk D 2015). As highlighted by the Young Foundation1, the quality of anyone’s life will depend on a certain amount of mental toughness (Mungi 2012). Whilst recognising the role of resilience and mental toughness in studying wellbeing, it is understood that resilience and mental toughness can be learnt and successfully built as a response to stress, adversity and challenge, enabling one to be more likely to cope with future problems (Kelly J 2019).

*Resilience is “a dynamic process encompassing positive adaptation within the context of significant adversity”* (Luthar SS 2003)*.*

*1 The Young foundation is a non-profit, non-governmental UK think tank that specialises in social innovation to tackle structural inequality).*

Mungi and colleagues describe “well-being” as a state at a point in time for an individual, they highlight that “resilience” is more of a continuum which adds an element of future proofing for well-being (Mungi 2012)2. Mung considered this to be an important concept to consider and stressed the importance of incorporating methods to measure resilience during the analysis of well-being (Mungi 2012).

**Mental health and wellbeing issues amongst young people**

It is recognised that the effects of increased use of technology, social media and falling levels of physical activity are having a detrimental effect not only on physical health but on the mental wellbeing on our youth today (Publications parliment UK 2019). In 2015, 24.1% of 15 year olds in the UK spent more than 6 hours, outside of school, online, while 94.8% of 15 year olds used social media sites before or after school (OECD 2017). The daily use of social media, amongst young people with behavioural disorders has been associated with risky behaviour, exclusion and truancy from school (NHS 2016). In addition, England has also witnessed a rise in the prevalence of ‘mental disorders’ in children aged 5–15 years, from 9.7% in 1999 to 11.2% in 2017 (OECD 2017). With a rise in mental health and wellbeing issues amongst young people, the most recent government led Child and Adolescent Mental Health Survey (NHS Digital 2018) identified that 1 in 8 young people aged between 5 and 19 have a clinically diagnosed mental health problem.

In addition the World Health Organization reported that approximately 10–20 percent of children and adolescents worldwide experience mental disorders (WHO 2018). Public Health England (PHE) suggest that mental health illnesses are a leading cause of health-related disabilities in children and young people, which can have adverse and long-lasting effects (Public Health England 2015).

As part of this study, it was reported that boys are more likely to be diagnosed with conduct disorders, hyperactivity or autism spectrum disorders whereas girls are more likely to be affected by emotional problems (NHS Digital 2018). Adolescents living in disadvantaged environments, with limited support outside of the school environment, are at an increased risk of mental health problems (National Centre for Children in Poverty, 2009), (Chung, Coquillette, Dizon, & Kovanda, 1998). When habitually exposed to poverty, family distress, and community violence, young people have an increased risk of delinquency, child abuse and neglect resulting in lower educational and occupational expectations (Mason & Chuang, 2001), (Merryman M 2012).

2 It is possible for a person to report low well-being but have high resilience and vica versa. (Kelly J 2019)

It is recognised that by not being exposed to challenges and being disconnected with social interaction and nature, the number of ways young people can build resilience and mental toughness are reduced which may ultimately affect mental health (Ahern, 2006). In a study on the effect of wilderness experiences in 130 adolescents, (Barton J 2016) highlighted that a lack of connection to nature has been associated with a diminished use of the senses, attention difficulties, and higher rates of emotional and physical illnesses (Louv 2005). With less than 1 in 4 young people regularly using a public space and less than 1 in 10 spending time in wild spaces (Moss S 2012), it is vital to seek ways to encourage all aspects of young people’s wellbeing in order to prevent poor mental health becoming a catalyst for problems later in life.

It is now generally accepted that connection with the natural environment is well known to provide a restorative effect. The Outward Bound Trust recently stated that there is a strong evidence base to show that engagement with natural environments is beneficial for mental health and well-being across all ages (The Outward Bound trust 2019). Activity days, multi-day or multi-week residential camps, provide valuable opportunities for positive social interaction and physical activity, increasing the resilience, self-esteem and wellbeing of young people from all backgrounds and ages (The Wildlife Trust 2015), (Bragg, 2014), (Merryman M 2012), (Ewert A. 2008), (Readdick C.A 2005) (Allen K 2011), (Allen, Cox, and Cooper 2006), (K. W. Henderson 2007)3.

In addition, a number of studies, ranging from small scale studies on Outdoor Programmes for At-risk Children (Ungar M 2005) to those for youths experiencing mental illness (Cotton 2013) have shown significant improvements in the ability of youths to improve psychological functioning and reduced distress related to interpersonal and mental health challenges (Berman & Davis-Berman, 2013; Hoag, Massey, & Roberts, 2014; Norton et al., 2014).

Evidence also suggests that unlike many educational programs, wilderness expeditions have long-lasting health benefits that increase over time. Participants who take part in wilderness expeditions are likely to continue to accrue benefits throughout life, resulting in potential savings to the UK economy, particularly with regard to the prevention and treatment of mental ill-health (Asfeldt M. 2014) (Hattie J 1997).

3. With the widespread understanding of the benefits of outdoor education and activity programs in UK schools, it was recently reported that over 20,000 schools take participate in these each year (BBC Countryfile 10Th May 2020). Research commissioned by Natural England covering 125 UK schools and over 40,000 pupils reported that 92% of schools said that outdoor education and activity camps improves pupils’ health and wellbeing and engages them with learning (Waite S. 2016). In addition, 85% of schools in this study also reported a positive impact on behaviour.

*“Learning Away has shown that a residential learning experience provides opportunities and benefits/impacts that cannot be achieved in any other educational context or setting. The impact is greater when residentials are fully integrated with a school’s curriculum and ethos” York Consulting (2015).*

In America, where more than 10 million children attend day or residential summer camps each year. A study carried out in 2007 where 2300 parents responded to pre, post and follow up questionnaires about their children’s growth experiences at camp reported statistically significant gains in improvements in the ability to make friends, positive identity, independence, peer relationships and attitude to adventure/exploration (K. W. Henderson 2007). In conclusion of their study, these workers suggested that research into the benefits of outdoor activities and activity camps has important implications for schools, child-care establishments, youth groups and youth offending teams. They suggested that such organisations should seek to ensure that the young people in their care have regular opportunities to interact with nature and green space in order to enhance their well-being.

**Methods for measuring outcomes: which one to use?**

Resilience and wellbeing are the most widely employed parameters which are assessed during studies on the effect of the outdoor environment and outdoor activities with young people. Examples include; (Beightol J 2012), (Cooper N 2004), (Ewert A. 2008), (Ewert A. 2011), (Hayhurst J 2015), (Kelly J 2019), (Overholt JR 2015), (Wagnild G. M. 1993), (Whittington A. 2016).

A few reports measure and describe changes in mental toughness, whilst other studies focus on questionnaires specifically referring to self-esteem, self-efficacy, self-image, self-control, self-confidence, self-empowerment, and decision (Norton CL 2014) (Russell KC 2001), (Russell 2006a) (Asfeldt M. 2014), (Cason DR 1993), (Hans TA 2000), (Hattie J 1997), (Hoag MJ 2013), (Paquette L. 2014), (Russell K C 2006b)\*. In a study on the effect of wilderness experiences in 130 adolescents, (Barton J 2016) assessed self-esteem using Rosenberg’s Self-Esteem Scale (Rosenberg M 1965).

There is concern that a large number of evaluation programmes are not methodologically sound (Lloyd 2013). In addition, such a range of assessment methods and small study groups hampering robust statistical analysis, it is difficult to have confidence when reporting significant improvements in the resilience, social skills and confidence in studies of adolescents attending activity camps and programmes. One particularly negative report suggested that as any changes reported often lack long term follow up, it is possible that any positive effect maybe transient, and short-lived. This was referred to as “post-residential euphoria” (Hattie J 1997). This issue was also highlighted in a recent study of the effects of Outdoor and Adventure Activities on University Students (Kelly J 2019). The group commented that whilst previous studies have shown improvements in resilience, they often lack matched control groups, relied on a single measure of resilience and had limited longitudinal follow-up. These researchers stressed the need for rigorous testing and controls (Kelly J 2019).

\*Main source of references from(Bragg J 2016).

In order to gather and analyse data, a number of researchers have employed a wide range of validated models to measure resilience such as the “Resilience Scale (RS)” (Wagnild G 1993) or the Conor Davidson resilience scale (CD-RISC) (Connor KM 2003), (see review (Scoloveno R 2017)).

In addition, following suggestions that resilience in girls is different to boys, the Adolescent Girls Resilience Scale (AGRS) was developed and employed (A. J. Whittington A 2015), (A. J. Whittington A 2017)4.

Other researchers, however, have developed their own scales based on selections of questions drawn from several sources (Ewert A. 2011), (Overholt JR 2015), or used measures themselves which were thought to be predictive of resilience (Beightol J 2012) (A. J. Whittington A 2015). One example includes the Camper Growth Index (CGI), a self-report based survey to assess factors of resilience on at-risk youth (Henderson KA. 2006). Using this tool, researchers collected data for both campers and a non- attending control group, one month prior to camp, at one month and six months post-camp. It was seen that the campers demonstrated statistically significant changes in attitudes to adventure/exploration, independence, making friends, positive identity, and peer relationships as a result of attending camp compare to the control group (Henderson KA 2007), (Merryman M 2012).

The Getting it right for every child (GIRFEC) program uses 3 assessment tools (the SHANARRI well-being indicators, Resilience Matrix, and My World Triangle) to gather information about a child's wellbeing to identify concerns and determine what support and action may be needed (Coles E 2016) (Appendix 1). Their online digital tool “Being me”, employs an Avatar (Alex), to ask questions and generate a Resilience Report, thus removing issues surrounding the filling out of questionnaires by a young person (<https://www.beingmeuk.com/>). The questions can be answered by individuals in their own time and space without the pressure of adult supervision. “Being Me” focusses on six modules of specific questions about resilience that converts the answers into a scoring system for the SHANARRI indicators (Resilience; Community; Peer Relations: School; Personal Risk and Internalising Risk) and the results can be used to provide support for young people within schools and for external bodies to gain funding for individual pupils who may benefit from additional support.

4Research on girls' development suggests that in addition to the broader description of resilience, girls' resilience is strengthened when they have significant and positive relationships with others (Jordan JV 2013). Positive relationships with others allow girls to encourage one another; aid in the development of self-esteem, feelings of worth, strength, and creativity and promote the development of courage and confidence to maintain one's voice.

The assessment of mental toughness is a well-established process which has been widely employed for assessing athletes, sports teams and the military. There are two well known tools, the Mental Toughness Questionnaire (MTQ48) and the Sports Mental Toughness Questionnaire (SMTQ) which are widely different in the components emphasized as the core components of mental toughness (Crust L 2011). In 2012, a study suggested that those adolescents who exercised and took part in regular physical activity scored higher on the mental toughness scale than those who did not (Gerber M. 2012) and some studies, employing the MTQ48 (or the shortened version MTQ18), have indicated that mental toughness is associated with better physical and psychological health in adolescents. Evaluating mental toughness in adolescents has also been suggested to have value in an educational setting by predicting response to stress and educational transitions (B. S.-T. Gerber M 2013), (F. A.-T. Gerber M 2015), (St Clair-Thompson H. 2016).

More recently, in recognition that the MTQ48 had been developed primarily for use with adult populations , McGeown and co-workers developed a Mental Toughness Scale for Adolescents (MTS-A) based upon the conceptual framework of the 4C’s employed by the MTQ48\*5, which include, challenge; commitment; control (life, emotions) and confidence (abilities, interpersonal) (McGeown S 2018). Early studies using this tool suggested that the mental toughness attributes assessed within the questionnaire correlate with reports of affective, cognitive and behavioural dispositions and results obtained were transferable from an educational context to adolescents’ lives in general (McGeown S 2018).

5The 4C’s model of mental toughness devised by Clough et al., the developer of the MTQ48, , is represented by: (1) challenge, the extent to which individuals see problems as opportunities for self-development; (2) commitment, as opposed to alienation, which reflects deep involvement with whatever one is doing; (3) emotional control concerns keeping anxieties in check; (4) life control reflects a tendency to feel and act as if one is influential; (5) confidence in abilities involves a high level (Clough P 2012).

**Summary**

It has been acknowledged that a resilient youth has a set of characteristics (self-esteem, hopefulness, ability to deal with stress, social competence, problem-solving, autonomy) which can be shaped and developed through effective programming (Cooper N 2004).6

There have been a wide range of reports and studies demonstrating positive effects of immersion in the outdoor environment and activity camps on children across a range of ages, and social backgrounds. It was noted that individuals from disadvantaged backgrounds and those with mental health issues responded well to a non-classroom environment and activity-based challenges and those with initially low resilience scores were likely to achieve the greatest gain (Kelly J 2019). In such cases it was proposed that the mechanism for change in resilience would appear to be appropriate levels of challenge, rather than specific exposure to outdoor adventure activities (Kelly J 2019).

It is clear that there is a need to be careful about how effects are measured and reported. Ideally, common ground needs to be found on the methodology used to assess the wellbeing and resilience of adolescents, although with a wide range of activities, the nature of camps and the number of methodologies employed this will be difficult to achieve. The main factors that can be controlled however are ensuring consistency in the tool used across all groups attending individual programmes, the way responses are measured, interpreted and reported. This is turn will provide larger numbers to be able to be employed for more robust statistical analysis. Data provided from further robust studies will aid in the future planning of childcare and investment in outdoor and adventure activity programmes in the future.

6 In this study commitment was defined as the perseverance and ability to carry out tasks successfully, despite problems or obstacles. Challenge was defined as seeking out opportunities for self-development. Those who scored high on challenge would see new situations as opportunities for self-development, rather than as threats, and would be more likely to actively seek out opportunities to develop. Control referred to being influential in one’s own life and was subdivided into life control and emotional control. It was observed that students who scored high on commitment would set goals and strive to achieve them; indeed, they would be determined to complete these goals, despite problems or obstacles they may encounter. Adolescents with high levels of life control would feel that they have the power to shape their own life and future, whereas those with high emotion control would be able to regulate their emotions (e.g., anxiety, anger) to an appropriate level of intensity, particularly in difficult situations. Finally, confidence referred to levels of self-assurance and was divided into confidence in abilities and interpersonal confidence. Those who were confident in their abilities would feel confident at attempting new or difficult tasks, whereas those with high levels of interpersonal confidence would feel confident in social situations, particularly in new or unfamiliar environments.

**Further reading. The Dulverton Trust 2018**

<https://www.probonoeconomics.com/sites/default/files/files/An%20evaluation%20of%20the%20impact%20of%20adventure%20learning%20and%20leadership%20programmes%20on%20young%20people_0.pdf>

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