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# 'It's good for their self-esteem': the substance beneath the label

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This paper provides an informed and critical understanding of the concept of self-esteem. It explores this psychological construct in relation to its use in adventure education and outdoor learning. Enhancing a participant's self-esteem is perceived to be fundamentally a good thing and is culturally linked to the Hahnian notion that implies outdoor education is good for character-building and more recently personal development. This paper suggests that the improvement of self-esteem has become a reified programme outcome as well as an argument for the value and importance of outdoor education programmes. In this paper I seek to address the often uncritical and at times evangelical claim that outdoor programmes enhance self-esteem. This paper looks at the development of self-esteem generally and then considers its appearance in the outdoor education literature. Aspects of this that relate to outdoor learning and adventure education include: development of the self, behaviour, disaffected young people, recent UK developments and common misconceptions regarding self-esteem. These are explored and their implications for practice and research are considered. The essence of this paper is that outdoor educators need to be more critical, informed and specific about exactly what it is they are trying to achieve, how their programmes are evaluated, particularly with outcomes that are related to potential changes in 'self' and how these changes are measured.

Keywords: *Self-esteem; Adventure education; Outdoor learning; Personal development*

## Rationale

The purpose of this paper is to provide some substance beneath the self-esteem label; namely an informed and critical discussion and examination of the self-esteem concept as used in adventure education and outdoor learning. To this end I explore the psychological construct of self-esteem, and other similar terms, specifically in relation to their use in adventure education and outdoor learning. Enhancing a participant's self-esteem is perceived to be fundamentally a good thing and is culturally

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linked to the Hahnian notion that suggests outdoor education is good for 'character-building' (Alvarez & Welsh, 1990; Cook, 1999), and more recently articulated as 'personal development' (Hopkins & Putnam, 1993; Passarelli, Hall, & Anderson, 2010). As such, improving a participant's self-esteem appears to have become a reified programme outcome as well as an argument for the value and importance of outdoor education programmes. For example, Knight (2011, p. 44) states that the Forest School programme would develop soft skills 'as well as [raise] confidence and self-esteem'; Bilton (2010, p. 220), discussing outdoor learning in the early years, suggests that outcomes from programmes include 'increased self-esteem'; and Stremba and Bisson (2009, p. 259) highlight how many students of adventure education programmes think that a ropes course 'builds self-esteem and that completing the challenge is "good for you"'. McWilliam (2004, p. 129) suggests that whilst for some outdoor practitioners theories appear irrelevant or as barriers to learning, others 'adopt a single theoretical model and apply it with uncritical evangelical zeal'. It is this uncritical and evangelical approach to enhancing self-esteem through outdoor education that this paper seeks to inform and illuminate in order to provide practitioners with the opportunity to gain a deeper understanding. Ultimately it is anticipated that this will improve their professional practice. I take a look at the development of self-esteem in general terms and then consider its use in the literature related to outdoor education. Following the themes generated in research (Leather 2010), I look at how self-esteem is discussed in relation to aspects of behaviour, disaffected young people and then consider some common misconceptions about its use. I conclude this paper by considering some implications for practice and research.

## Introduction

The term self-esteem is used uncritically as a general idiom and synonym for self-concept, self-confidence as well as self-esteem. Self-esteem reveals a person's overall assessment or appraisal of their own worth and encompasses an individual's beliefs and emotions (Mruk, 2006; Smith & Mackie, 2007). Our self-concept is what we *think* about the self (Butler & Gasson, 2005; Harter, 1990). Our self-esteem, both the positive or negative evaluation of the self, is how we *feel* about it (Sanderson, 2010; Smith & Mackie, 2007). Our self-confidence relates to our certainty of our judgement or ability about our competence in specific skills, and is more explicitly detailed by Bandura's (1977) concept of self-efficacy.

The concept of self-esteem appears to hold increasingly important ideas around which discussion and measurement have occupied academics (e.g., see Dweck, 1999; Harter, 1990; Marsh, Richards, & Barnes, 1986a; Mruk, 2006). In education, specifically, Barrow, Bradshaw, and Newton (2001) and Lawrence (2006) focus on enhancing self-esteem in the classroom, and Branden (1994, p. 218) argues that 'we know a lot about the skills that make for competence in human interactions, and this knowledge needs to be part of a young person's education'. Dweck (1999, 2006) challenges and explores popular misconceptions about self-esteem, particularly related to its prevalence in the education discourse, and helpfully confronts the

notion of fixed social traits and their role in motivation, personality and development. Dweck's findings are discussed later in this paper.

Self-esteem appears to retain an importance in the consciousness of the general public as evidenced by the range of literature offering advice on enhancing self-esteem, particularly for children (e.g., Plummer & Harper, 2007; Sher, 1998). Similarly, self-esteem has entered mainstream discourse and passed into everyday general use as exemplified in this news item about charity work:

> Funding has allowed Vista Society for the Blind to provide activities and residential trips for children during school holidays. Paula Varney, from the society, said the children's confidence and self esteem had 'gone through the roof' because they had had the opportunity to take part in different events (BBC News, 2011).

As such I suggest that its meaning has become a generalised, homogenised term that is widely used, often in an over-simplified manner. This may be unsurprising, as Mruk (2006, p. 8) points out: 'we all know what self-esteem "really is" because it is a human phenomenon, and we are all human beings'. However, this is not particularly useful and in this paper I seek to provide some clarity on this over-simplification and at the same time navigate a way through the apparent complexity of terminology about the self.

There has been much debate over the relative merits of the array of terms such as self-esteem, self-concept and self-confidence as well as other expressions about the self. According to Mruk the many terms used lead to confusion and definitional chaos. There is so much variation that defining self-esteem 'involves entering a "definitional maze" that causes considerable confusion' (2006, p. 10). However, this is not a recent dilemma. Over 30 years ago Shavelson, Hubner, and Stanton criticised research associated with self-concept studies because of the lack of consistency, stating that 'definitions of self-concept are imprecise and vary from one study to the next' (1976, p. 408). From my research it is apparent that little has happened to clarify and simplify this confusion. It is my intention in this paper to offer some clarity and discussion around self-esteem for those engaged in adventure education and outdoor learning. Throughout the literature there is a sense that common language notions of self-esteem are sometimes substituted for more precise, explicit, scientific definitions, creating the illusion of a universally accepted, well-defined phenomenological body (Butler & Gasson, 2005). The mysterious description and inter-changeability of terms has led to concepts such as self-image and self-esteem being used synonymously and the expansion of an excess of ill-defined and confusing labels such as self-worth, self-belief, self-concept, self-awareness and self-regard being employed (Butler & Gasson, 2005). Harter (1990) argues that the terms used to describe the self are simplistic prefixes rather than legitimate constructs, and as such much of the literature on self appears uninterpretable. With these concerns and confusions in mind, self-esteem is still a term worth exploring. For the purpose of this paper I suggest this definition: self-esteem reveals a person's overall evaluation of their own worth and encompasses an individual's beliefs and emotions (Mruk, 2006; Smith & Mackie, 2007). Simply stated, self-esteem is how we feel about ourselves. In order

to understand the contemporary use of self-esteem it is worth considering how we arrived at this point.

## The historical perspective

Current constructions and understanding of self are founded in William James's *Principles of Psychology* (1890/1983). James's work is considered to be the most important text in the history of modern psychology (Wozniak, 1999). Similarly George Mead's (1934) *Mind, Self and Society* is recognised as popularising the concept of self. According to Mead (1934, p. 156) the self emerges out of 'a special set of social relations with all the other individuals' involved in a given set of social interactions and contexts, and in a review of educational research Shavelson et al. (1976, p. 411) defined self-concept as 'self-perceptions that are formed through one's experience with interpretations of one's environment'. They suggest that self-concept is influenced especially from evaluations by significant others and reinforcements of one's own behaviour. Shavelson et al. (1976) were influenced by the work of Mead (1934), who made acceptable the notion of self as an object of awareness and suggested that a person's response to himself[1] is in some way influenced by how others respond to him. He saw the individual as an object of awareness composed of a variety of different selves. He acknowledged the importance of significant others in the construct of self-worth. He defined significant others as those who administer punishment and rewards in a person's life. The formation of self is therefore dependent on how a person perceives he is judged by significant others and comparing these perceptions with the ideals and standards he has developed for himself. Essentially, Mead argues that the concept of self is a social product and construct arising out of an individual's experiences with other people (Harter, 1999; Mruk, 2006). This is still held as the essence of self-esteem, and as discussed below we will see that there has been a proliferation of 'self' terms related to self-esteem.

Early attempts to estimate self-esteem in childhood and adolescence used the Rosenberg (1965) Self-esteem Scale and the Coopersmith (1967) Self-esteem Inventory, and a review over the last 20 years suggests the Piers–Harris Self-concept Scale is the most frequently employed measure (Butler & Gasson, 2005). These scales are uni-dimensional. For example, the Rosenberg scale, still readily and freely available, asks 10 questions and produces a single number to indicate general self-esteem. These scales are a development from William James's original 1890 definition that presents self-esteem as a ratio, found by dividing one's successes in important areas of life by the failures in them (James, 1890/1983). There now appears, both theoretically and psychometrically, to be an acceptance of multi-dimensionality with respect to the self, with these scales designed around such a concept (e.g., Harter, 1985, 1990, 1999). These scales have a number of different domains upon which individuals judge and report, with often as many as 80 self-reporting questions that are both age and context specific. For example, Harter's (1985) Self Perception Profile for Children has fewer domains than Harter's (1988) Self Perception Profile for Adolescents, reflecting the more complex constructions of self with maturity. As well as age, individual domains measure different aspects of life (e.g. scholastic, social, athletic, physical and

behavioural) as well as an overall 'global self-worth', another term that is discussed below. These multi-dimensional constructs of self appear to acknowledge the complexities of human life and the variety of social contexts within which people interact and the variety and difference of multiple 'significant others' who may influence an individual's self-esteem. It may be useful to consider this in parallel with how thinking about concepts of intelligence has developed. For example, Gardner's (1983) Multiple Intelligence Theory acknowledges multiple forms of intelligence whereas traditional IQ tests reduce IQ to a single construct and acknowledge only what is tested.

Having a positive sense of self has been suggested by Harter (1990) to be central to the adaptive functioning of the individual, a characteristic that is perhaps useful in order to conform to social norms, behave appropriately and remain within mainstream society including education. Harter (1985, 1988, 1990, 1999) uses the term 'global self-worth', which she defines as, 'the overall value one places on the self as a person, in contrast to the domain specific evaluations of one's competence or adequacy' (Harter, 1990, p. 67). According to Mruk (2006) the gap between the psychological and social views of the self is closing. He suggests that Harter brought the two together using modern developmental psychology to show how behavioural competence works with social approval to create self-esteem or self-worth. Harter (1999, p. 5) uses the terms 'self-esteem' and 'self-worth' interchangeably and considers these as global evaluations of the self. However, Harter (1999, p. 5) reserves the term self-concept for 'evaluative judgements of attributes within discrete domains'. For example, Harter's (1985) Self Perception Profile for Children has five discrete self-concept domains (scholastic, social, athletic, physical, behavioural) as well as one generic global measurement of self-worth.

Alongside this lack of congruity regarding self-esteem, there has been more recently the development of related concepts: 'self-respect', 'mindfulness' and 'self-acceptance'. For example, Frauman's (2010) Mindfulness Model for Outdoor Education Settings suggests that a consequence of using this model is increased self-esteem for participants. Szymanska's (2010, p. 122) 'Unconditional self-acceptance' advocates accepting yourself as you are since, 'you are an incredibly complex mix of traits and actions . . . it is important not to rate yourself as a whole'. Koch and Shepperd (2008) found that self-acceptance influenced high self-esteem, which can occur in the absence of high competence. From this brief consideration of the literature it appears that the current place of self-esteem is well articulated by Kristjánsson (2007, p. 240), who argues 'that research into global self-esteem in psychology and education has reached its limits and lost its luster' and that, with research into self-respect, we could 'reasonably expect empirical psychologists to come up with findings of people's self-respect that would be more valid than those for, say, global self-esteem'.

This historical journey is to highlight the simple original conceptualisation of self-esteem and the methods of measuring it, how terms are used inter-changeably and, perhaps more importantly, to highlight how the variety and multiplicity of terms has evolved and diversified over the decades. Nonetheless, despite recent philosophical debates and disagreements about the appropriateness of self-esteem in education (see

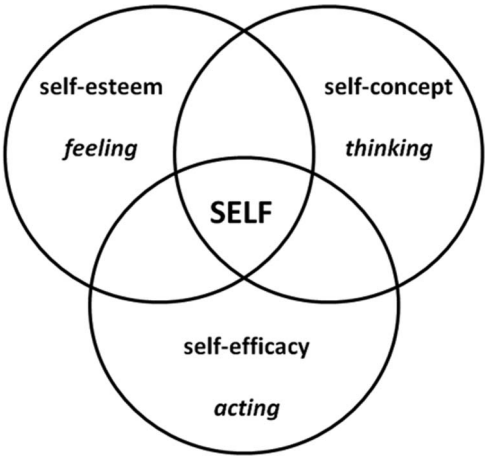


Figure 1. Constructions of self: a visual summary.

Cigman, 2001, 2004, 2008; Ferkany, 2008; Smith, 2002), Mead's original work still underpins these discussions. To conclude, I suggest that in this paper it is useful to consider constructs of the self in three broad categories; how we feel, self-esteem; how we think, self-concept; and how we act, self-efficacy. I represent the feeling, thinking and acting aspects of the self in Figure 1 as a three-sphere model,[2] since they are arguably distinct aspects of the self as well as being interdependent. This is not presented as a theory, merely a useful manner in which to summarise and represent these terms in order to be of use in adventure education and outdoor learning.[3]

The intention in this paper is to focus on self-esteem, or how we feel about ourselves based upon the evaluative judgements of others, since this is the term about which much is written and claimed as discussed above.

## Self-esteem and behaviour

Educational philosophy has been influenced by the notion that children with high self-esteem are immunised from a wide range of problems. It has been widely considered that those with high self-esteem act independently, assume responsibility, tolerate frustration, attempt new tasks with confidence and readily offer assistance to others (Emler, 2001). Conversely, those with low self-esteem are more likely to have difficulty in forming and sustaining social relationships, show depression, become pregnant during their teenage years, have suicidal thoughts, experience unemployment (male), and have eating disorders (female) (Emler, 2001). However, the weight of evidence suggests those with low self-esteem are not more likely to commit crime, use or abuse illegal drugs, drink alcohol, smoke to excess, abuse children or fail academically. Emler (2001) summarises that those with low self-esteem treat themselves badly and may invite bad treatment by others, but they tend not to treat others badly. Self-esteem is often related to issues of negative behaviour; for example, according to Lawrence (2006) the raising of self-esteem can lead to fewer behavioural problems.

Emler (2001) argues that self-esteem is potentially linked to behaviours in complex ways. The simplest option is that self-esteem has its own direct effect on behaviour, but this is only one of many possibilities. These include the likelihood either that self-esteem is the consequence rather than the cause, or that self-esteem and behaviour are both influenced by something else. According to Emler this is unfortunate since: 'much research has not been up to the task of analysing these links adequately and is therefore virtually useless in answering the critical question: does self-esteem affect behaviour or not?' (2001, p. 58). Cigman (2004) critiques the work of Emler as over-simplifying the concept of self-esteem, and she distinguishes between the 'situated' and his 'simple' concepts of self-esteem and suggests that the first is our ordinary, evaluative concept; the second is a simplification and corruption of this, and that 'situated self-esteem is attributed to individuals who are seen as located in a world that they perceive either reasonably or unreasonably' (2004, p. 95). Situationalists consider that multiple constructed realities suggest that the context is the prime determinant of behaviour. Cigman (2004) argues that it is the situated concept of self-esteem that plays a vital role in education.

Behaviour, self-esteem and adolescence receive attention that I suggest is of particular interest to those outdoor programmes designed to work with these client groups. Harter, Waters, and Whitesell (1998) consider the multiple selves that are created as individuals move into adolescence. This greater differentiation brings with it the potential liability that the attributes that define one's multiple selves may lead to opposing characteristics (e.g. cheerful with peers but depressed with parents; outgoing with friends but inhibited in romantic relationships). Seemingly contradictory attributes can and do cause perceived conflicts within the adolescent's self-portrait, particularly for females. The presence of opposing attributes also raises concerns over which such attributes reflect the 'true self' versus 'false self' behaviour (Harter et al., 1998). More recently, Myers, Willse, and Villalba (2011) discuss the promotion of self-esteem in adolescents through counselling in relation to 'wellness factors'. Using a wellness paradigm allows a person's relative strengths (both higher and lower wellness) to be identified: 'and the person can then begin to use these strengths to build a stronger sense of self-esteem . . . because self-esteem is so critical in adolescence, and . . . also an integral part of wellness' (Myers et al., 2011, p. 30).

Having looked at self-esteem and behaviour, I now address one commonly held misconception about how to measure or judge someone's self-esteem.

## A common misconception

It is my experience that teachers and educators, particularly those working with children, can be heard claiming how they can see changes in their pupils' or children's self-esteem, particularly as a result of an outdoor education experience. This suggests that as educators we can observe participants' behaviour and as a result judge what is happening to how they are feeling about themselves (i.e. their self-esteem). Thus an alternative to self-reporting questionnaires (as Rosenberg and Harter, etc.) for the measurement of self-esteem is the observational method. Harter

(1999, p. 39) discusses this as the concept of 'behaviourally presented self-esteem', and she developed an instrument to measure this in very young children, who are generally unable to cognitively or verbally formulate a general concept of their worth. Essentially, adults familiar with young children are able to evaluate a range of behaviours (confidence, initiative, curiosity and independence) and thus evaluate the child's self-esteem. However, when this method is used with older children and adolescents, this does not work. Emler (2001) highlights that research has shown that observer ratings are largely unrelated to self-reports in studies comparing observed values with self-reported values. The evidence is clear that observational methods are an unreliable method of assessing an individual pupil's self-esteem as is now discussed. This is supported in a small-scale study by Miller and Parker (2006), who therefore advise caution when teachers make judgements about pupils' self-esteem. They suggest that many primary teachers wish to help children who suffer from low self-esteem. In order to do this, it is necessary to identify such children. It is almost taken for granted that teachers can make quite accurate judgements based on the knowledge built up through day-to-day interactions with the children. Miller and Parker (2006) looked at the match between teacher judgements of their pupils' self-esteem and the children's own self reports. Their findings suggested that teachers are not as good at this as they would like to think. This research assumes that self-reports are most valid. It is arguable that the flaw in discussions and research on self-esteem is the very nature of the instruments used to collect and generate a measurement. Self-reports can be susceptible to exaggerators, random response givers, and over-conformers (Adams, Vetter, & Allen, 1975). Nonetheless, it is clear that those engaged in self-esteem research argue that this is the way to determine how someone feels. The key to minimising these issues is the context in which these self-reporting measures are administered and for what purpose. So whilst there are intrinsic problems associated with self-reports, these can be ameliorated by an appropriate methodology. There is a cultural arrogance that argues 'teacher knows best'. I argue here that educationally we as teachers and educators are arrogant if I tell you how you are feeling about yourself. As your teacher I can observe how you are acting and make a value judgment on that regarding the appropriateness of behaviour. I cannot necessarily observe your actions and then judge how you are feeling.

From my experience there still appears a widely held belief that teachers and outdoor educators are able to judge pupils' self-esteem. Observed behaviours can be indicators of a pupil's self but there is a danger of jumping to conclusions and believing that we are good at this judgement (Miller & Parker, 2006). Additionally, there are other misconceptions about self-esteem and how to foster it. There is a simplistic connection between poor behaviour and low self-esteem, despite evidence to the contrary (such as in Emler, 2001). These misconceptions appear within outdoor education; for example, the idea that challenging teenagers on adventurous activities, with controlled risk-taking, in a positive way will somehow improve their self-esteem, improve their behaviour and these lessons will then be transferred to their regular environment. From my review of the literature there is little evidence to support this simplistic view. For example, research by Eddington (2007) suggests that 'adventurous' has very

different characteristics for different individuals, perhaps linked to introvert–extrovert personality types, preferred learning styles, and intelligence profiles. Therefore, unless it is carefully crafted, planned and facilitated within a programme, the simplistic belief that self-esteem will be increased is in danger of becoming a 'one-size-fits-all' approach that fails to recognise the variety and diversity of individuals and their needs. Dweck (1999) addresses these common misconceptions about self-esteem and suggests a different approach that I suggest could be of use for outdoor educators. She argues that self-esteem is not something we give to people by telling them about their high intelligence or how good they are at a particular activity. It is something we equip them *to get for themselves* by teaching them to enjoy challenge and effort, to value the learning process over the appearance of cleverness and to use mistakes as routes to mastery. Dweck's (2006) key contribution about self-esteem relates to implicit theories of intelligence. According to Dweck, individuals can be placed on a continuum according to their implicit views of where ability comes from. Some believe their success is based on innate ability; these are said to have a 'fixed' theory of intelligence. Others, who believe their success is based on hard work and learning, are said to have a 'growth' or an 'incremental' theory of intelligence. Individuals may not necessarily be aware of their own mindset, but their mindset can still be determined based on their behaviour. It is especially evident in their reaction to failure. Fixed-mindset individuals dread failure because it is a negative statement on their basic abilities, while growth-mindset individuals do not mind failure as much because they realise their performance can be improved. These two mindsets play an important role in all aspects of a person's life. Dweck (2006) argues that the growth mindset will allow a person to live a less stressful and more successful life. Carol Dweck's work is the result of over 40 years of research in social psychology and is still widely influential. For example Hoyt, Burnette, and Innella (2012) consider the role of implicit theories in influencing the effectiveness of successful role-models in leadership, and Mangels, Good, Whiteman, Maniscalco, and Dweck (2011) investigate how emotion blocks the path to learning under stereotype threat. As such, I believe that Dweck's work has much to offer those involved in outdoor learning.

## Outdoor education and the development of self

The improvement of self-constructs continues to be a widely found objective of outdoor education programmes (Barrett & Greenaway, 1995; Ewert, 1989; Hattie, Marsh, Neill, & Richards, 1997; Nichols, 2004; Royce, 1987). Previously, during the period of the 1940s to the late 1970s, the development of 'character', values, motivation and attitude were more common aims (Cook, 1999). Royce (1987) proposed a classification[4] of objectives in relation to self associated with outdoor education found in programme design (Table 1), which at the time was useful given the breadth of meanings.

The most commonly measured constructs in outdoor education are those that evaluate the self, particularly self-esteem as highlighted by Royce (1987). Notably, this classification by Royce (1987) is now dated as it does not include Bandura's

Table 1. Classification of self.

| 'Finding out' about self | Evaluation of self | Development of self |
|---|---|---|
| Self-awareness | Self-confidence | Self-development |
| Self-discovery | Self-assurance | Personal development |
| Self-knowledge | Self-esteem | Character training |
| Self-confrontation | Self respect | Character building |
| | Self-worth | Character development |
| | | Self-realisation |
| | | Self-actualisation |
| | | Self-discipline |
| | | Self-help |
| | | Self-expression |

Source: Royce (1987).

self-efficacy. Research by Hattie et al. (1997) found that outdoor education programmes with a clear focus on personal development have, on average, small to moderate positive impacts on self-esteem, self-concept and self-efficacy and that programmes without a self-development philosophy are inclined to have negligible impacts. There have been extensive studies and reviews of research on the effects of outdoor education on self-constructs (e.g., Cason & Gillis, 1994; Ewert, 1990, 1991; Gillis & Speelman, 2008; Hattie et al., 1997; Marsh et al., 1986a, 1986b; Neill, 2002).

Meta-analytic research has shown that an outdoor experience can result in notable outcomes with respect to enhancing self-esteem and that they have particularly strong lasting effects (Cason & Gillis, 1994; Haney & Durlak, 1998; Hattie et al., 1997; Neill & Richards, 1998). Meta-analysis is a procedure designed to synthesise the findings across many studies in order to, 'make sense of the large volume of seemingly incongruent research findings and ascertain the major sources of variability in the programme effects' (Cason & Gillis, 1994, p. 41). What is not clear from these analyses is the control for, or the effect of, post group euphoria (PGE). The potential inflation of immediate post-test results has been termed PGE by Marsh et al. (1986b). The authors suggest that PGE is an important threat to the validity of any conclusions based on self-reporting data. At the end of intense experiences, participants typically have feelings of elation. The important concern is not whether a PGE exists or whether it is good or bad. The critical question is whether the measures are biased by a PGE so that the study does not validly reflect the impact of the experience. PGE could represent a threat to validity in the self-report data, and Marsh et al. suggest that the time-series design provides control for such effect.

Cason and Gillis (1994) were the first to statistically integrate previous research findings for similar age groups. Their analysis concentrated on adolescents as they formed a significant part of the participant population. Harter et al. (1998) suggest that adolescence is a time when fluctuation in self as a result of changing environment and situation[5] is particularly noteworthy. Cason and Gillis (1994) found slightly stronger outcomes in changes in self-esteem for younger rather than older adolescents.

This is consistent with other research suggesting that older adolescence is a period during which self-concept is somewhat resilient to change (Hattie, 1992).[6] Cason and Gillis (1994) found a 12.2% improvement for the average adolescent participating in an adventure programme. This is significant because it is a tangible and quantified measure that shows the effect of improving self-esteem. This figure is greater than the score of other types of intervention and, as Cason and Gillis (1994) discuss, adolescents who participate in adventure programming are 'better off' (with respect to self) than those who do not, although they are unclear as to the precise meaning of 'better off'. A significant positive correlation was found between the length of the programme and the effect size. The results of this meta-analysis would suggest that adventure programmes are more effective if they are longer; however, this analysis was unable to determine an optimal length of adventure programming (Cason & Gillis, 1994, p. 44). However, course length is not everything. Freeman (2011) highlights how in Outward Bound the course's length was considered less important than a post-programme follow-up when considering the impact on self-esteem.

Hattie et al. (1997) agreed with Cason and Gillis (1994) regarding the length of experience. Both suggest the effects in self-esteem are greater for participants in longer programmes. Hattie et al. (1997) concluded that there were greater effects with programmes longer than 20 days. However, their sample of data for short-term courses (less than nine days) was only 10% of the total sample for the meta-analysis. Hattie et al. (1997) acknowledge that it is rare to find comparisons in outcomes related to the length of the course. Hattie et al. (1997) did come to similar conclusions to Cason and Gillis (1994) regarding the positive change in self-esteem following an adventure programme. Hattie et al. found the effect of adventure programmes on self-esteem exceeded that of other educational programmes, and concluded that 'adventure programs have a major impact on the lives of participants, and that this impact is lasting' (1997, p. 70).

These reviews and analyses of research (Cason & Gillis, 1994; Ewert, 1983; Hattie et al., 1997; Neill, 2002; Neill & Richards, 1998) consider the outcomes of the learning process directly associated with self-constructs. They strongly support the notion that individuals participating in programmes may increase their self-esteem in parallel, but also and importantly that there are other outcomes such as cognitive competencies, locus of control and potentially physical fitness. It is important to notice that there are a range of domains of influence of programmes, some of which are closely related to self-esteem; however, for the purposes of this paper, I will not be exploring these. For Hattie et al. (1997, p. 66): 'Outward Bound [courses] stimulates the development of interpersonal competence and in the self-concept domain has greatest effect on independence, confidence, self-efficacy and self-understanding', notably constructs of self other than self-esteem. Barrett and Greenaway (1995, p. 50) conclude that, 'improvements caused by some applications of outdoor adventure in dimensions of self-concept, locus of control and in socialisation with peers and adults are likely to contribute to the process of healthy adolescent development'.

Gillis and Speelman (2008) offer a more recent meta-analysis of outdoor adventure challenge programmes. Their research has a more precise focus than earlier

studies, concentrating on ropes-challenge course-type programmes between 1986 and 2006. Specifically they included 44 studies with published outcomes, with an average programme length of 15 hours. Particularly, Gillis and Speelman only included studies with control groups, thus the estimated effects were relative to controls. They found that despite self-esteem being a common outcome measure in challenge course research (Hattie et al., 1997), the effect size for self-esteem as an outcome is one-half that for self-efficacy. They state that, 'Organizations and researchers should learn from this data to promote challenge courses for their more significant outcome qualities rather than continue to attempt to prove the elusive impact on self-esteem' (Gillis & Speelman, 2008, p. 129).

The limitations with the meta-analyses appear to be the lack of reliable published data as well as the enormous variety of programmes on offer to participants. These ranged from college-based courses in outdoor education to three-week Outward Bound programmes. The reliability of the instruments used to make the initial pre-programme and post-programme assessments can also be questioned, as can the large number of unknown variables. It seems that caution is needed when considering the findings of these pieces of research, particularly given the arguments regarding definitions, assumptions and lack of clarity discussed above. Additionally, while these large-scale reviews of the effectiveness of outdoor adventure programmes are of interest and relevance, they tend to be contextually and culturally bound in a North American approach to both outdoor education and educational research.

## Recent developments: a UK perspective

The lack of clarity of terms regarding self-esteem and the research findings outlined above have in part had an impact on outdoor education, and this is now considered from a UK perspective. One area of significant growth in adventure education in the United Kingdom has been in overseas expeditions (Allison, 2008). The literature in this area (see Allison, 2002; Beames, 2003, 2004, 2005; Stott & Hall, 2003) has been based upon research on extended expeditions with organisations such as Raleigh International. When considering these expeditions and the social construction of the self, Beames (2005, p. 14) found that participants developed 'a certain mental resilience, became more willing to undertake challenges, and gained a greater understanding of themselves'. Beames (2005) suggests that these adventurous expeditions provide an intense and extended outdoor education experience and act as a useful indicator as to the potential that outdoor education has for the development of self. This is an example of a more considered appreciation of how 'the self' is affected by an outdoor programme.

In outdoor learning there has been a re-emergence of less adventure-focused programmes particularly for younger children, such as 'Forest Schools', The John Muir Award (John Muir Trust, n.d.) and the opportunities encouraged by the UK government; in England, the Department for Education and Skills's *Learning Outside The Classroom Manifesto* (Department for Education and Skills, 2006; Ofsted, 2008) and in Scotland, *Curriculum for Excellence through Outdoor Learning* (Learning and

Teaching Scotland, 2010). In the Outdoor Manifesto, developing self-esteem features prominently: 'Staying away for a few days or more is a powerful way of developing key life skills, building confidence, self-esteem, communication and team working' (Department for Education and Skills, 2006, p. 5)—although there is no evidence provided to support these statements. According to Ofsted (2008, p. 8), learning outside the classroom can also help to combat under-achievement: 'Student responses to questionnaires showed that their confidence and self-esteem had also risen'. However, it is unclear as to how this was measured and whether esteem and confidence were conflated in these questionnaires. The key issue that I wish to address in this paper is the uncritical and unsubstantiated claims made by programme designers and policy-makers about how outdoor learning will raise self-esteem, and from the discussions above it is intended that these concerns should now be more apparent.

Since 1994 there has been a growth and development of so-called Forest Schools (Knight, 2009). A Forest School is defined by the Forest School England network as an, 'inspirational process that offers children, young people and adults regular opportunities to achieve, and develop confidence and self-esteem through hands-on learning experiences in a woodland environment' (Forest Education Initiative, 2008). Knight (2009, p. 119) acknowledges that defining a Forest School is not straightforward and is contested, none the less it is a way of facilitating learning outdoors and uses 'the natural environment to promote social and emotional progress'.

Forest Schools originated in Europe in the early twentieth century as a way of teaching about the natural world. By the 1980s it became part of the Danish early years programme. In 1994 a group of nursery nursing students visiting Denmark witnessed the benefits of Forest School for themselves and brought the idea back to Bridgwater College in Somerset. There, lecturers that accompanied the students considered how they could apply what they had seen to the childcare provision in their own Early Years Excellence Centre. Since then the idea has grown and Forest Schools are spreading throughout Britain (Forest Education Initiative, 2008). A key feature of Forest Schools is the development of self-identity and confidence in young children, aged three to seven, where the philosophical underpinning is child-initiated play.

The research on the Forest School educational approach is beginning to develop (e.g., Massey, 2004; O'Brien & Murray, 2006, 2007; Swarbrick, Eastwood, & Tutton, 2004) following the growth and popularity of the Forest School movement. Swarbrick et al. (2004) highlight the importance of the outdoor environment as an educational resource, and explore the relationship between self-esteem and successful learning through the Forest School approach to outdoor education. However, the apparent raising of self-esteem amongst participants is only supported by anecdotal evidence.

O'Brien and Murray (2006) noted that it was clear from their study that adapting to weather conditions was a physical challenge for the participating pupils, and they observed that 'children with less confidence in their physical ability and lower self-esteem became colder more quickly than the others who would rush around and keep busy' (p. 38). It was unclear how the children's self-esteem was measured.

It appears that the evidence base regarding self-esteem from the research on Forest Schools is not currently that robust and again needs to be treated with caution. This critical view is supported by the *Review of Research on Outdoor Learning* by Rickinson et al. (2004). Their review of a pilot evaluation of two Welsh Forest Schools claimed to show that the children involved in the initiative demonstrated increased self-confidence, self-esteem and teamworking skills; however, ' . . . the evidence base for this evaluation appears quite weak' (Rickinson et al., 2004, p. 23). This is important to highlight because this is the essence of this paper: that claims regarding self-esteem are poorly evidenced, suggest a lack of understanding about the construct and its measurement as well as the associated issues. This lack of apparent understanding sees self-esteem used synonymously with other self-constructs.

As previously discussed, observer ratings are an unreliable method of assessing an individual pupil's self-esteem (Emler, 2001; Miller & Parker, 2006). Despite this concern, there are some interesting findings in O'Brien and Murray (2007). In their evaluative case study, they found six key themes in the direct impact of Forest Schools on pupils, including their confidence and social skills. Confidence was characterised by self-confidence and self-belief that came from the children having the freedom, time and space, to learn, grow and demonstrate independence. It seems that self-belief and self-confidence are being conflated with self-esteem in these articles. The children's improved social skills were demonstrated through an increased awareness of the consequences of their actions on other people, peers and adults, and acquiring a better ability to work cooperatively with others as a result of their Forest School experience. O'Brien and Murray (2007) also considered impacts that were wider than the Forest School experience. The theme they termed 'new perspectives' suggests that the teachers and outdoor educators gained a new perspective and understanding of the children as they observed them in a very different setting (to regular school) and were able to more readily identify their individual learning styles. The consequence of this is that teachers may have an enhanced understanding of their pupils' abilities, behaviours and needs, and (pertinent to this paper) may refer to this as a perceived increase in self-esteem.

## Working with disaffected young people

The use of the outdoors, in terms of personal and social development, for young people who are disaffected or excluded from mainstream education in the United Kingdom remains well established. For example, a study by Leather (2010) explored how outdoor learning was used as an integral part of the curriculum for a 'successful' pupil referral unit. In an evaluation of an outdoor education programme for students with emotional and behavioural difficulties, Fox and Avramidis (2003) found that the programme was successful in promoting positive behaviour and academic gains for most pupils, and that by the end both pupils and staff held a positive perception of outdoor education. They conclude that although, 'outdoor education may not form a solution to dealing with "problematic" behaviour, it represents a powerful, albeit underused, tool for reducing disaffection, promoting inclusive practice and decreasing

the risk of permanent exclusion' for what they describe as 'this vulnerable group of pupils' (Fox & Avramidis, 2003, p. 281). The enhancing of self-esteem was an aim in this programme.

Additionally, there is a supply of academic literature relating to the traditional adventure education approach to personal and social development (e.g., Cason & Gillis, 1994; Hopkins & Putnam, 1993; Mortlock, 1984). In recent years, there has been a challenge to the traditional thinking that has informed and underpinned many of the personal and social development approaches found within the United Kingdom, such as Outward Bound. Davis-Berman and Berman (2002) discuss 'Risk and Anxiety in Adventure Programming'. They suggest an alternative paradigm where participants do not move out of their 'comfort zones' (Tuson, 1994). Davis-Berman and Berman (2002) argue that reinforcing safety, feelings of security and personal challenge all need to be balanced in an adventure programme. They discuss how clients' basic needs have to be met and that challenge should be provided whilst working within the comfort zones of the participant. Davis-Berman and Berman (2002) suggest that leaders and facilitators learn to assess and intervene when anxiety develops and that it is essential for them to build a 'therapeutic' relationship.

Brookes (2003) provides a critique of 'Neo-Hahnian Outdoor Education Theory'. Brookes argues that Neo-Hahnian beliefs assume that adventure experiences 'build character', 'develop persons', 'actualise selves', or have therapeutic effects associated with changes in personal traits, and that in social psychological terms Neo-Hahnian thought is 'dispositional' in that it favours explanations of behaviour in terms of consistent personal traits. Brookes asserts that outdoor adventure education programmes do not build character, but they may provide situations that elicit particular behaviours. Brookes concludes that this belief in the possibility of 'character-building' is a source of bias, not a foundation of outdoor education. As such I suggest that this argument implies that the development of self-esteem could be considered to be unaffected by these programmes and is another source of bias in outdoor education.

Berman and Davis-Berman (2005) suggest that a 'Positive Psychology' approach to outdoor education can offer an alternative perspective to the 'dynamic tension' encouraged by the 'comfort zone' approach. They make the assertion that people change for positive reasons, within the context of supportive communities, and stress the importance of creating a healthy, supportive community in which people can act on their positive strivings. Eddington (2007) found that a shared experience was more important for some than the facilitation of experience or highly adventurous experiences. Specifically, Berman and Davis-Berman (2005) suggest that communities are created when there is an emergence of conditions such as working with nature and experiencing the outdoors because of an appreciation of the environment in a context where sharing and safety (physical and emotional) are important when focusing on group members' strengths.

A further critique of the 'comfort zone' approach is offered by Brown (2008). He argues that the 'comfort zone' model uses risk to promote situations of disequilibrium and dissonance, and argues that this model does not find strong support in the educational literature, particularly Piaget's 'cognitive development' (Atherton, 2011a) or

Festinger's 'cognitive dissonance' (Atherton, 2011b). As such it would, he suggests, be beneficial to reframe the model as a metaphor for post-activity discussion, and not to use it to underpin programming and pedagogy in adventure education settings. Ringer and Spanoghe (1997) also argue that managing emotional risk in adventure groups requires psychological and emotional well-being and maturity on the part of the outdoor practitioner. I suggest that these are all factors that need to be considered if programme aims are considering the enhancement of participants' self-esteem.

## Implications for practice and research

The discussions above have offered the reader an insight into the complexities of defining, discussing and measuring constructions of the self and have placed this in the context of adventure education and outdoor learning. By doing so, it is not to suggest that outdoor educators should avoid discussing aspects of self-esteem or having features for the enhancement of self-esteem designed within the programme. The essence of this paper is that outdoor educators need to be more critical and specific about what it is exactly they are trying to achieve and how these programmes are evaluated, with outcomes concerning self-measurement.

It may be seductive to hear and then use the claim of Hattie et al. (1997, p. 70) that the effect of adventure programmes on self-esteem exceeded that of other educational programmes and that 'adventure programs have a major impact on the lives of participants, and that this impact is lasting'. This generalisation and simplification of the use of self-esteem is not unusual in outdoor education as discussed above. Whilst outdoor education can in part consider personal and social development as one of its key themes, unless this is more specifically defined for an individual programme there is room for uncertainty, confusion or just blandness. Since self-esteem is a complex and contested construct, it is clear that it is important to become more precise and provide substance to this label, especially when considering programme design, as Higgins agrees when he states:

> Simplistically seeking to raise self-esteem through experiential programmes may well be problematic unless the teacher/facilitator provides a structure to help participants learn from their experiences so that the values context is not left to chance . . . . (2009, p. 51).

It may be that a more definite focus for educational programmes, especially with regard to the development of self, would be more helpful. In a recent study, Leather (2010) found the use of the Pupil Attitudes to Self and School within a pupil referral unit as an effective means of assessing changes in behaviour and impacts of a programme. The Pupil Attitudes to Self and School claims not to be a measure of self-esteem (G. Williams, email correspondence, 2009) but an attitudinal measure focused on the specific context of self in a school setting. Whilst the Pupil Attitudes to Self and School has not yet been critically evaluated, its focus on core competencies in a specific context was found to be useful. Kristjánsson (2007) argues for a justified, domain-specific self-esteem, where the principal domain is self-respect. The

domains of Harter's (1985, 1988) Self Perception Profiles may allow outdoor educators to focus on distinct areas when looking at designing educational programmes. For example, it may be beneficial for a client group of children to concentrate on the social and physical domains, rather than the scholastic or athletic.

In addition to programme design, it is suggested that outdoor educators refrain from making claims about clients' self-esteem. The research evidence demonstrates that we are not as good as we would like to think in judging self-esteem (Emler, 2001; Miller & Parker, 2006). We may observe a gain in confidence and extrovert behaviour during the course of a programme, and this should not be confused with self-esteem. In this paper I argue for greater care in the language used and the claims made.

Perhaps the most useful practical point is from the work of Dweck (2007). Most educators want their children or clients to be successful and feel good about themselves. Dweck (2007) discusses how the language used when praising can actually be damaging to an individual's sense of self. So rather than 'you are good at canoeing' because the client was successful in following a prescribed course, it is better to say 'you really worked hard, kept trying and finally went in a straight line'. Helping individuals to develop their 'growth mindset' creates motivation, resilience and an enhanced sense of self. Praising intelligence or ability gives a 'fixed mindset' that when presented with a challenge at which they fail causes withdrawal from the task, lack of motivation and a diminished sense of self (Dweck, 2007). Dweck's writing is clearly influenced by that of the psychologist Martin Seligman. His work on learned helplessness (Seligman, 1975), learned optimism (Seligman, 1990) and later on positive psychology (Seligman & Csikszentmihalyi, 2000) is influential and has relevance to adventure education and outdoor learning. Positive psychology has the objective of developing excellence through the understanding and enhancement of factors that lead to growth, including those relating to the growth of sense of self. It holds the view that growth occurs when positive factors are present, as opposed to the notion that it is the result of dynamic tension. Berman and Davis-Berman (2005) explore this view with respect to outdoor education and argue that traditional models of change that rely upon disequilibrium may not be the best to use in outdoor programmes. They suggest that an approach based upon positive psychology can 'increase motivation by helping to create autotelic experiences' (Berman & Davis-Berman, 2005, p. 23) rather than increasing risk. An autotelic experience is one where an individual generally does things for their own sake, rather than in order to achieve some later external goal.

In summary, even in the light of definitional chaos, assumption and confusion, there is research evidence that adventure education and outdoor learning can affect a participant's sense of self and that this can have transferable benefits to other contexts, and as such it can be regarded as a powerful developmental tool. Outdoor programmes have a significantly positive impact on the lives of participants and the effect of adventure programmes on self-esteem exceeds that of other educational programmes (Hattie et al., 1997). With this article it is hoped that a greater understanding of the substance beneath the label of self-esteem can lead to an enhanced experience for participants through a more informed and thoughtful programme design and evaluation.

## Notes

1. The use of the male pronoun is directly from the work of Mead and is no reflection upon any bias of the author.
2. This representation can arguably be drawn in a number of different ways.
3. I acknowledge that there are other constructions of self discussed in the field of psychology. This is not meant to be an exhaustive exploration of all terms, but rather a clarification of popular terms predominantly found in education literature.
4. It is interesting to note that Bandura's (1977) self-efficacy is absent from this list. For a detailed paper on self-efficacy and outdoor leadership, see Propst and Koesler (1998). It is not the purpose of this paper to explore all the psychological aspects of self and outdoor education. For a comprehensive summary, see Neill (2007). It is the intended purpose to delve more deeply into the popular concept of self-esteem.
5. Harter does not specifically mention brain, cognitive, hormonal and physiological changes, which are also 'noteworthy' in adolescent development.
6. Recent work (Blakemore & Choudhury, 2006, p. 307) on the development of the adolescent brain has identified how synaptic connections in the brain actually change during adolescence, and supports this claim about later adolescence when they state that, 'certain social cognitive skills might be much more difficult to incorporate into brain networks once they are established after puberty'.

## Author biography

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## References

Adams, R., Vetter, H., & Allen, H. (1975). Some implications of non-reporting and self-reporting of crime on criminal justice research. *American Journal of Criminal Justice*, *1*(1), 1–10.

Allison, P. (2002). *Values, narrative and authenticity: A study of youth expeditions in the 1990s* (Unpublished PhD dissertation). University of Strathclyde.

Allison, P. (2008). *Welcome 360 degrees on overseas youth expeditions.* ESRC Conference Presentation. Retrieved July 4, 2008, from http://www.webboard.ed.ac.uk/wb/default.asp?action=9&read=5215&fid=487

Alvarez, A. G., & Welsh, J. J. (1990). Adventure: A model of experiential learning. *Children & Schools*, *13*(1), 49–57.

Atherton, J. S. (2011a). *Learning and teaching; Piaget's developmental theory.* Retrieved April 1, 2011, from http://www.learningandteaching.info/learning/piaget.htm

Atherton, J. S. (2011b). *Learning and teaching; Cognitive dissonance and learning*. Retrieved April 1, 2011, from http://www.learningandteaching.info/learning/dissonance.htm

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191–215.

Barrett, J., & Greenaway, R. (1995). *Why adventure? The role and value of outdoor adventure in young people's personal and social development: A review of research*. Coventry: Foundation for Outdoor Adventure.

Barrow, G., Bradshaw, E., & Newton, T. (2001). *Improving behaviour and raising self-esteem in the classroom: A practical guide to using transactional analysis*. London: David Fulton Publishers.

BBC News. (2011). *Children in Need helps visually-impaired youngsters.* Retrieved November 18, 2011, from http://www.bbc.co.uk/news/uk-england-leicestershire-15790242

Beames, S. (2003). Overseas youth expeditions: Past, present, and future. In B. Humberstone & K. Richards (Eds.), *Whose journeys?* (pp. 289–296). Penrith: Institute for Outdoor Learning.

Beames, S. (2004). Overseas youth expeditions with Raleigh International: A rite of passage? *Australian Journal of Outdoor Education*, *8*(1), 29–36.

Beames, S. (2005). Expeditions and the social construction of the self. *Australian Journal of Outdoor Education*, *9*(1), 14–22.

Berman, D. S., & Davis-Berman, J. (2005). Positive psychology and outdoor education. *Journal of Experiential Education*, *28*(1), 17–24.

Bilton, H. (2010). *Outdoor learning in the early years: Management and innovation* (3rd ed.). Abingdon: Routledge.

Blakemore, S., & Choudhury, S. (2006). Development of the adolescent brain: Implications for executive function and social cognition. *Journal of Child Psychology and Psychiatry*, *47*(3), 296–312.

Branden, N. (1994). *The six pillars of self-esteem*. London: Bantam.

Brookes, A. (2003). A critique of neo-Hahnian outdoor education theory. Part two: 'The fundamental attribution error' in contemporary outdoor education discourse. *Journal of Adventure Education and Outdoor Learning*, *3*(2), 119–132.

Brown, M. (2008). Comfort zone: Model or metaphor? *Australian Journal of Outdoor Education*, *12* (1), 3–12.

Butler, R. J., & Gasson, S. L. (2005). Self esteem/self concept scales for children and adolescents: A review. *Child and Adolescent Mental Health*, *10*(4), 190–201.

Cason, D., & Gillis, H. L. (1994). A meta-analysis of outdoor adventure programming with adolescents. *Journal of Experiential Education*, *17*(1), 40–47.

Cigman, R. (2001). Self-esteem and the confidence to fail. *Journal of Philosophy of Education*, *35*(4), 561–576.

Cigman, R. (2004). Situated self-esteem. *Journal of Philosophy of Education*, *38*(1), 91–105.

Cigman, R. (2008). Enhancing children. *Journal of Philosophy of Education*, *42*(3), 539–557.

Cook, L. (1999). The 1944 Education Act and outdoor education: From policy to practice. *History of Education*, *28*(2), 157–172.

Coopersmith, S. (1967). *The antecedents of self esteem.* Palo Alto, CA: Consulting Psychologists Press.

Davis-Berman, J., & Berman, D. (2002). Risk and anxiety in adventure programming. *Journal of Experiential Education*, *25*(2), 305–310.

Department for Education and Skills. (2006). *Learning outside the classroom manifesto*. Nottingham: Department for Education and Skills Publications.

Dweck, C. S. (1999). *Self-theories: Their role in motivation, personality, and development*. Philadelphia, PA: Psychology Press.

Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York: Random House.

Dweck, C. (2007). The perils and promises of praise. *Educational Leadership*, *65*(2), 34–39.

Eddington, C. (2007). *What is adventure? An investigation into how personal experiences and concepts of adventure compare with theories of adventure* (Unpublished masters dissertation). University of Edinburgh. Retrieved September 11, 2008, from http://www.education.ed.ac.uk/outdoored/research/dissertation_eddington.pdf

Emler, N. (2001). *Self esteem: The costs and causes of low self worth*. York: Joseph Rowntree Foundation.

Ewert, A. W. (1983). *Outdoor adventure and self concept: A research analysis*. Eugene, OR: University of Oregon Press.

Ewert, A. W. (1989). *Outdoor adventure pursuits: Foundations, models, and theories*. Columbus, OH: Publishing Horizons.

Ewert, A. W. (1990). Revisiting the concept of self-esteem through outdoor experiential activities. *Journal of Experiential Education*, *13*(2).

Ewert, A. W. (1991). Revisiting the self-concept: A new twist on an old subject. *Journal of Experiential Education*, *14*(1).

Ferkany, M. (2008). The educational importance of self-esteem. *Journal of Philosophy of Education*, *42*(1), 119–132.

Forest Education Initiative. (2008). *What is an FEI recognised Forest School?* Retrieved September 19, 2008, from http://www.foresteducation.org/forest_schools.php

Fox, P., & Avramidis, E. (2003). An evaluation of an outdoor education programme for students with emotional and behavioural difficulties. *Emotional and Behavioural Difficulties*, *8*(4), 267–283.

Frauman, F. (2010). Incorporating the concept of mindfulness in informal outdoor education settings. *Journal of Experiential Education*, *33*(3), 225–238.

Freeman, M. (2011). From 'character-training' to 'personal growth': The early history of Outward Bound 1941–1965. *History of Education*, *40*(1), 21–43.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. London: Fontana Press.

Gillis, H. L., & Speelman, E. (2008). Are challenge (ropes) courses an effective tool? A meta-analysis. *Journal of Experiential Education*, *31*(2), 111–135.

Haney, P., & Durlak, J. A. (1998). Changing self-esteem in children and adolescents: A meta-analytic review. *Journal of Clinical Child Psychology*, *27*(4), 423–433.

Harter, S. (1985). *Self-perception profile for children*. Denver, CO: University of Denver Press.

Harter, S. (1988). *Self-perception profile for adolescents*. Denver, CO: University of Denver Press.

Harter, S. (1990). Issues in the assessment of the self concept of children and adolescents. In A. M. LaGreca (Ed.), *Through the eyes of the child* (pp. 292–335). Needham Heights, MA: Simon & Schuster.

Harter, S. (1999). *The construction of the self: A developmental perspective*. New York: The Guilford Press.

Harter, S., Waters, P., & Whitesell, N. R. (1998). Relational self worth: Differences in perceived worth as a person across interpersonal contexts among adolescents. *Child Development*, *69*(3), 756–766.

Hattie, J. (1992). *Self-concept*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Hattie, J. A., Marsh, H. W., Neill, J. T., & Richards, G. E. (1997). Adventure education and Outward Bound: Out-of-class experiences that make a lasting difference. *Review of Educational Research*, *67*(1), 43–87.

Higgins, P. (2009). Into the big wide world: Sustainable experiential education for the 21st century. *Journal of Experiential Education*, *32*(1), 44–60.

Hopkins, D., & Putnam, R. (1993). *Personal growth through adventure*. London: David Fulton.

Hoyt, C. L., Burnette, J. L., & Innella, A. N. (2012). I can do that: The impact of implicit theories on leadership role model effectiveness. *Personality and Social Psychology Bulletin*, *38*(2), 257–268.

James, W. (1890/1983). *The principles of psychology*. Cambridge, MA: Harvard University Press.

John Muir Trust. (n.d.). *John Muir Award.* Retrieved April 12, 2011, from http://www.jmt.org/jmaward-home.asp

Knight, S. (2009). *Forest Schools & outdoor learning in the early years*. London: Sage.

Knight, S. (2011). *Forest School for all.* London: Sage.

Koch, E. J., & Shepperd, J. A. (2008). Testing competence and acceptance explanations of self-esteem. *Self and Identity*, *7*(1), 54–74.

Kristjánsson, K. (2007). Measuring self-respect. *Journal for the Theory of Social Behaviour*, *37*(3), 225–242.

Lawrence, D. (2006). *Enhancing self-esteem in the classroom* (3rd ed.). London: Paul Chapman Publishing.

Learning and Teaching Scotland. (2010). *Curriculum for excellence through outdoor learning*. Glasgow: Learning and Teaching Scotland.

Leather, M. (2010). *An exploratory case study of a 'successful' pupil referral unit (PRU)* (Unpublished doctoral thesis). Retrieved from Doctoral Theses collection archived in Exeter's repository ERIC. http://hdl.handle.net/10036/97436

Mangels, J. A., Good, C., Whiteman, R. C., Maniscalco, B., & Dweck, C. S. (2011). Emotion blocks the path to learning under stereotype threat. *Social Cognitive and Affective Neuroscience*, *7*(2), 230–241. doi: 10.1093/scan/nsq100

Marsh, H. W., Richards, G., & Barnes, J. (1986a). Multidimensional self-concepts: The effect of participation in an Outward Bound program. *Journal of Personality and Social Psychology*, *50*(1), 195–204.

Marsh, H. W., Richards, G., & Barnes, J. (1986b). Multidimensional self-concepts: A long-term follow-up of the effect of participation in an Outward Bound program. *Personality and Social Psychology Bulletin*, *12*(4), 475–492.

Massey, S. (2004). The benefits of a Forest School experience for children in their early years. *Primary Practice*, *37*, 31–35.

McWilliam, A. (2004). Learning theory and experiential education. In P. Barnes & B. Sharp (Eds.), *The R.H.P. companion to outdoor education* (pp. 129–137). Lyme Regis, UK: Russell House Publishing.

Mead, G. (1934). *Mind, self and society*. Chicago, IL: University of Chicago Press.

Miller, D., & Parker, D. (2006). 'I think it's low self-esteem'. Teachers' judgements: A cautionary tale. *Education 3–13*, *3*(1), 19–25.

Mortlock, C. (1984). *The adventure alternative*. Milnthorpe, UK: Cicerone Press.

Mruk, C. J. (2006). *Self-esteem research, theory and practice: Towards a positive psychology of self esteem* (3rd ed.). New York: Springer.

Myers, J. E., Willse, J. T., & Villalba, J. A. (2011). Promoting self-esteem in adolescents: The influence of wellness factors. *Journal of Counseling and Development*, *89*(1), 28–37.

Neill, J. T. (2002, January 11–13). *Meta-analytic research on the outcomes of outdoor education*. Paper presented at the 6th Biennial Coalition for Education in the Outdoors Research Symposium, Bradford Woods, IN. Abstract retrieved November 20, 2007, from http://wilderdom.com/research/researchoutcomesmeta-analytic.htm

Neill, J. T. (2007). *Psychological aspects of outdoor education*. Retrieved December 17, 2010, from http://wilderdom.com/Psychological.html

Neill, J. T., & Richards, G. E. (1998). Does outdoor education really work? A summary of recent meta-analysis. *Australian Journal of Outdoor Education*, *3*(1), 2–9.

Nichols, G. (2004). A model of the process of personal development through the medium of outdoor adventure. In P. Barnes & B. Sharp (Eds.), *The R.H.P. companion to outdoor education* (pp. 26–33). Lyme Regis, UK: Russell House Publishing.

O'Brien, E. A., & Murray, R. (2006). *A marvellous opportunity for children to learn: A participatory evaluation of Forest School in England and Wales*. Farnham: Forest Research.

O'Brien, E. A., & Murray, R. (2007). 'Forest School' in England: An evaluation of three case study settings. *Environmental Education*, *84*, 8–9.

Ofsted. (2008). *Learning outside the classroom. How far should you go?* London: Crown Copyright.

Passarelli, A., Hall, E., & Anderson, M. (2010). A strengths-based approach to outdoor and adventure education: Possibilities for personal growth. *Journal of Experiential Education*, *33*(2), 120–135.

Plummer, D. M., & Harper, A. (2007). *Helping children to build self-esteem: A photocopiable activities book* (2nd ed.). London: Jessica Kingsley Publishers.

Propst, D. B., & Koesler, R. A. (1998). Bandura goes outdoors: Role of self-efficacy in the outdoor leadership development process. *Leisure Sciences*, *20*(4), 319–344.

Rickinson, M., Dillon, J., Teamey, K., Morris, M., Choi, M., Sanders, D., & Benefield, P. (2004). *A review of research on outdoor learning*. Shrewsbury: Field Studies Council.

Ringer, M., & Spanoghe, F. (1997). 'Can't he see me crying on the inside?' Managing psychological risk in adventure programs. *Zip Lines*, *32*, 41–45.

Rosenberg, M. (1965). *Society and the adolescent self image.* Princeton, NJ: Princeton University Press.

Royce, D. (1987). Adventure experience and affective learning: Where are we going? *Journal of Adventure Education and Outdoor Leadership*, *4*, 12–14.

Sanderson, C. A. (2010). *Social psychology.* New York: John Wiley & Sons.

Seligman, M. P. (1975). *Helplessness: On depression, development, and death*. San Francisco, CA: W. H. Freeman.

Seligman, M. P. (1990). *Learned optimism: How to change your mind and your life*. New York: Simon & Schuster.

Seligman, M. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, *55*(1), 5–14.

Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self concept: Validation of construct interpretations. *Review of Educational Research*, *46*(3), 407–441.

Sher, B. (1998). *Self-esteem games: 300 fun activities that make children feel good about themselves*. Chichester: John Wiley & Sons.

Smith, E. R., & Mackie, D. M. (2007). *Social psychology* (3rd ed.). Hove: Psychology Press.

Smith, R. (2002). Self-esteem: The kindly apocalypse. *Journal of Philosophy of Education*, *36*(1), 87–100.

Stott, T. A., & Hall, N. E. (2003). Changes in aspects of students' self-reported personal, social and technical skills during a six-week wilderness expedition in arctic Greenland. *Journal of Adventure Education and Outdoor Learning*, *3*(2), 159–169.

Stremba, B., & Bisson, C. A. (Eds.). (2009). *Teaching adventure education theory: Best practices*. Leeds: Human Kinetics.

Swarbrick, N., Eastwood, G., & Tutton, K. (2004). Self-esteem and successful interaction as part of the Forest School project. *Support for Learning*, *19*(3), 142–146.

Szymanska, K. (2010). Unlocking psychological health: Unconditional self-acceptance. *The Coaching Psychologist*, *6*(2), 122–123.

Tuson, M. (1994). *Outdoor training for employee effectiveness*. London: Institute of Personnel Management.

Wozniak, R. H. (1999). *Introduction to The principles of psychology, William James (1890)*. Retrieved March 31, 2009, from http://psychclassics.yorku.ca/James/Principles/wozniak.htm