



A paradigm shift that never was. (A critique of Neo-Hahnian outdoor education theory part three)

Andrew Brookes¹ 

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Abstract

The idea that certain outdoor education (OE) programs consistently improve character traits has been a recurring theme not only in OE practice but also in some approaches to research and theory (Brookes, 2003a, 2003b). Sometimes referred to as “character building,” such approaches to OE persist although perhaps less prominently than in the past (Dyment & Potter, 2015). The idea of character-trait building is consistent with everyday beliefs about personality, but what is surprising is that strands of OE research and scholarship remain rooted in beliefs about personal traits that have been scientifically discredited for decades. This article considers some barriers which could help explain why OE research and scholarship have failed to exhibit a paradigm shift which should have eventuated had OE research more faithfully reflected key developments in psychological science and stayed within the bounds of scientific credibility.

Keywords Neo-Hahnian · Situationist · Outdoor education · Research · Character

Introduction

The idea that certain outdoor education (OE) programs consistently improve character traits has been a recurring theme not only in OE practice but also in some approaches to research and theory (Brookes, 2003a, 2003b). Sometimes referred to as “character building,” such approaches to OE persist although perhaps less prominently than in the past (Dyment & Potter, 2015). Character-trait development has been advocated and researched as an effect or benefit of OE programs not only for groups of participants but also broadly across generations of youth. The term character building can also refer to moral development, or to interpersonal skills development, but my focus here is on personal traits.

✉ Andrew Brookes
a.brookes@latrobe.edu.au

¹ La Trobe University, Bundoora, Australia

In OE discourse some universalist tendencies of character-trait building approaches are towards one end of a spectrum, at the other end of which are situationist approaches (Brookes, 2006). Those approaches towards the universalist end focus on OE programs as a kind of formulation or tonic thought to benefit participants across the board. Conversely, a situationist approach considers experience to be subjective, individual, and circumstantial, and considers program benefits as likely contingent on differences between individuals, on program location, and for any given individual, on how a program unfolded for them. Situationist approaches to OE attempt to account for geographical, historical, social, and cultural differences, and to consider the subjective experience of individuals. A situationist approach does not rule out possible universal benefits of OE programs, but universal effects would emerge from multiple investigations that properly considered circumstances and individual differences. Situationist social psychology research contributes to understanding personal development aspects of situationist OE, broadly replacing the idea of personality defined by traits with the concept of person and situation.

The idea that OE programs can be conceived as inputs which output personality change is congruent with the way most people think about personality, and has undoubtedly contributed to the enduring appeal of some approaches to OE. However, implicit lay theories of personality on which at least some approaches to character building have been based rely on assumptions that have long been debunked with near scientific certainty in the psychology literature. In a focussed review I previously examined discrepancies between some extant approaches to OE research and settled psychological science (Brookes, 2003a, 2003b).

Given OE programs of all stripes were distinguished in this review by outdoor locations and associated social situations, research into personal development-focussed OE required an understanding of situationist social psychology (Brookes, 2003a, 2003b). In particular, OE theorising ought to acknowledge disparities between lay tendencies to attribute behavioural change in outdoor settings to personal traits and research that found personality traits had at best weak explanatory powers within consistent situations, and very little explanatory power across situations (for example the outdoor situation and everyday life). That discrepancy between what lay people tended to believe about personality, and what research could prove, was termed the fundamental attribution error (Ross & Nisbett, 1991).

I drew on Ross and Nisbett (2011 orig. 1991) as a well-regarded and influential review of situationist social psychology research at the time, written for those outside the field. The integrity of OE, as an applied field of research, required scholarship which did not arbitrarily overlook pertinent work in underlying fields, including psychology, but it is moot how many readers of my earlier work, if not already familiar with key social psychology findings, did apprise themselves of those findings. Even so, rather than attempt here to devise a persuasive condensation of Ross and Nisbett (2011), itself a book-length condensation of extensive research, I have assumed a reader familiar with social psychology research findings, or willing to become familiar. Ross and Nisbett (2011) remains an influential and well-regarded work, but readers could also turn to other sources, including recent textbooks. In what follows I consider some barriers which could

explain why discrepancies between OE theorising and established psychological science persist and could continue to do so.

Barrier 1: Motivated reasoning

My original approach aimed to contribute to the scientific robustness of OE research. OE research and scholarship at the time was eclectic and not consistently tied to any discipline but was, I presumed, bounded by established science relating not only to psychology but to physical laws, human physiology, human health, climate, natural systems, social worlds, culture and so on. Conceivably an OE research finding might be consequential for a wider field, but any such original contributions to a wider field would be tested by peer review in that wider field, not in the OE literature. Put another way the OE literature was not where scholars would look for findings which challenged established psychological science. Where a discrepancy existed the default position would be to defer evaluation of contentious psychology findings to the psychology literature.

Attention to situationist social psychology might advance theory and research in the areas of OE sometimes associated with the work of Kurt Hahn and more generally associated with the idea of character-trait building, but not without relinquishing some long-held tenets (Brookes, 2003a, 2003b). Even among OE researchers there was the possibility that adherence to long-held beliefs would not be dislodged by a journal article or conference presentation. Discussing his own experience of Outward Bound in the USA, Vernon (2020) described commitments which reminded him of religious fervour:

Through my research and educational involvement with the American Outward Bound Schools (A-OB), I was introduced to the mythos of Hahn – lovingly referred to as “Uncle Kurt” on many bases ... most often through a series of parables: Hahn and the shoeless foot-race ... Hahn and the declines of modern youth ... Hahn and Hitler ... In each, Hahn’s ingenuity, compassion, honor, strength of will and determination to bring forth these same qualities in others are recounted and passed around as educational and personal inspiration. But the circumscribed narratives of Hahn that are shared among the OAE programs of the United States are at best partial and even possibly not historical ... they function, understandably, to orient members to the values of the organization and then to provide an ideal, generalized other for members to construe the appropriateness of their own thoughts and behaviors. In other words, members of these communities are taught to ask and act from “What would Hahn do?”, and in doing so, they tell stories of Hahn less as a way to describe someone to be known than to share a vision of how they desire to be known and to know themselves. Outdoor educators (at least where I write from in the United States) have, therefore, been given few reasons to examine the historical accuracy of these stories. (Vernon, 2020, p. 2)

Vernon's (2020) historical analysis concluded that Hahn's own approach to character building reflected Hahn's personal beliefs about the development of homosexual thoughts during adolescence and was conceived as a kind of pre-emptive conversion therapy. My focus is contemporary, and I have used the term neo-Hahnian to draw a distinction between Hahn's actual thought and later approaches to OE in his name. Signs of what Vernon (2020) found could be vestigial or absent in contemporary Hahnian programs – one should not assume what was true at inception continues to be so. Vernon's (2020) critique does go to the role of mythos in anchoring commitment to neo-Hahnian OE (see also Brookes, 2015).

Given such commitment, an ordinary human response to critique, whether of the mythos or the theoretical foundation, could be to dig in. In an influential paper, Mercier and Sperber (2011) comprehensively reviewed research on how humans reason and concluded that reasoning primarily functions consistently with confirmation bias, which is to say that following evidence and reasoning to form a conclusion is the exception, not the norm. The default setting for most of us is to seek reasons and evidence which support our existing intuitions or beliefs. In the field of moral psychology Haidt (2012) in *The Righteous Mind* synthesised research on reasoning for a wider readership: "Reasoning can take us to almost any conclusion we want to reach, because we ask 'Can I believe it?' when we want to believe something, but 'Must I believe it?' when we don't want to believe. The answer is almost always yes to the first question and no to the second"(p. 91). It is likely, because it would be normal, that many individuals steeped in traditions of Hahnian character building would find reasons to disregard or dismiss critical discourses. What might appear from outside as an anti-science bias would be better described as motivated reasoning, or what Campbell and Kay (2014) refer to as "solution focussed" reasoning.

Situationist critique of neo-Hahnian thought is concerned with assumptions about personality traits. Plaks et al. (2009) argue that individuals will go to some lengths to preserve their lay personality theories, which are "critical starting assumptions from which much of social cognition proceeds" (p. 1078). Here "each theory carries with it a constellation of allied beliefs that are derived from the core belief," and "people implicitly understand that these meaning systems are cornerstones of their social cognition" (p. 1078). "*Thus, they deploy a range of psychological defenses to ward off threats to their theory and preserve the subjective sense that their meaning system is an effective tool for making sense of human behavior* [emphasis added]" (p. 1078). There is strong possibility that motivated reasoning has and will limit discourse on the implications of situationist social psychology for OE, although individual researchers can, of course, choose to identify and defeat a bias.

Barrier 2: Trait attributions are simple and intuitive, situationist explanations are demanding and counter-intuitive

A shift from trait-based explanations, which are straightforward and intuitive, to situationist explanations which are complex and counter-intuitive, complicates OE theory and research considerably. Situationist explanations require more effort and at least some applied psychology knowledge. As Ross and Nisbett (2011) observed:

Our intuitive ideas about people and the principles governing their responses to their environment are generally adequate for most purposes of the office and the home; but they are seriously deficient when we must understand, predict, or control behavior in contexts that lie outside our most customary experience – that is, when we take on new and different roles or responsibilities, encounter new cultures, analyze newly arisen social problems, or contemplate novel social interventions to address such problems. (Ross & Nisbett, 2011, p. 8)

Although certain situations elicit predictable responses (for example Zimbardo, 2007), on the whole, situated explanations of behaviours have to consider differences in individual responses to any objective situation. Moreover, subjective interpretation of situations limits the extent to which individuals can be said to have shared an experience:

While applied practitioners are bound to be situationists, their ultimate success may depend upon their appreciation of the other two fundamental insights ... that is, [1] the crucial role of subjective interpretation and [2] the dynamic nature of cognitive and social systems. *The first of these additional insights obliges the practitioner to take into account (and if necessary, to change) the actors' subjective appraisals of their particular situation and of any interventions designed to improve that situation* [emphasis added]. (Ross & Nisbett, 2011, pp. 204 - 205)

A situationist OE curriculum would rest on professional knowledge that included an understanding of counter-intuitive situationist psychology. The pay-off could be curriculum centred on helping individuals understand how their own and other's behaviour is shaped not only by situations but also by different ways individuals interpret situations. The surmised benefit would be not so much behaviour shaped by OE-formed traits, but rather behaviour informed by better self-knowledge. Given distinct situations are a defining characteristic of OE practice, it would make sense to frame some curriculum goals of OE around the psychology of situations.

Another layer for consideration is added by Ross and Nisbett's (2011) second "fundamental insight" (above), that social situations and beliefs about social systems are dynamic (cf. character traits which are by definition stable):

[This] second insight obliges the practitioner to recognize the dynamics both of the social systems within which people function and of the cognitive systems through which they process information. In particular, the sophisticated practitioner recognizes that social communities and belief systems alike are stabilized by potent forces, but that both types of systems can be changed profoundly when, by accident or design, those stabilizing forces are undermined. (Ross & Nisbett, 2011, p. 205)

Even if the barrier of confirmation bias in favour of character-trait based conceptions of OE is overcome, the alternative requires attention to how individuals understand and respond to social situations, and attention to how OE programs create and define social circumstances which may change over time, and which conceivably change from one instance of a program to another.

As I foreshadowed in the introduction, the magnitude of incorporating insights from established situationist social psychology into OE programs should become apparent to those who have sufficient background knowledge. Particularly for those OE programs which involve personal development, the implications of situationist social psychology are potentially disruptive, and onerous. An understanding of the work summarised by Ross and Nisbet (2011) is arguably essential background knowledge for those who teach such programs, but that is a significant requirement and is not a current norm (cf. Thomas et al., 2019).

Barrier 3: Re-evaluating extant research acknowledging the possibility of attribution error

Any re-evaluation of character-trait building OE theory has to account for extant OE research which purports to show successful character-trait building. One important question is whether research which relied on participant surveys is a potential site of attribution error, particularly if survey results elicited what respondents believed, as distinct from what they observed. Certainly, the potential for respondents' self-theories to confound self-reports has been long known. In a highly influential article, Podsakoff and Organ (1986) observed:

[M]any people have lay theories of how personality, behaviour, [and] psychological states ... are interrelated This would be less of a problem if we were asking people to recall discrete events, the perception and recall of which are less vulnerable to distortion. But in self report research, we often ask for summary judgements. When we do so, we are inviting respondents to array their judgements consistent with prevalent lay theories. (Podsakoff & Organ, 1986, p. 534)

Self-report studies are more common in OE than studies in which observers rated participant behaviour, but Ross and Nisbett (2011) noted evaluations by raters can also be subject to attribution bias:

Simply stated, no amount of reliability in the assessments of a single rater (nor even agreement between different raters) proves that the consistency lies in the behavior of the person being rated. A rater can persist in beliefs or stereotypes that are unsubstantiated by objective response data or that are substantiated only by interpreting such data in the light of one's presuppositions. (Ross & Nisbett, 2011, p. 99)

Because lay theories tend to be dispositionist, research that found participants attributed personal trait development to OE is to be expected (Brookes, 2003a, 2003b). Moreover, laypersons who tend towards trait-based or stereotyping explanations for the behaviours of others tend to assume trait effects are strong (Plaks et al., 2009).

It might be difficult to definitively evaluate potential failures to account for attribution error. Two decades ago, Hattie et al. (1997) reported that the nomothetic OE

research (studying classes or cohorts of people in order to derive generalizations), which they reviewed meta-analytically, attributed outcomes to OE such as conscientiousness, independence, emotional stability, confidence, aggression (reduction), assertiveness, neurosis (reduction), and likeability, all of which appear to refer to psychological traits. Other purported outcomes, such as self-understanding, organizational competence, values, physical fitness, and physical appearance do not necessarily refer to psychological traits, while others remain difficult to interpret without understanding the original study, for example femininity and masculinity. Trait-based claims, which are scientifically inexplicable except by attribution error, might be mixed with plausible claims that participants gained insights, learned skills, or acquired beliefs.

Ambiguity as to whether traits are the subject of research is important because there are alternatives to trait-based explanations which might not be subject to attribution bias. According to Ross and Nisbett (2011):

Individuals may behave in consistent ways that distinguish them from their peers not because of their enduring predispositions to be friendly, dependent, aggressive, or the like, but rather because they are pursuing consistent goals using consistent strategies, in light of consistent ways of interpreting their social world. (Ross & Nisbett, 2011, p. 20)

Goals, strategies, and interpretations are all feasible foci for educational interventions. Sociability, for example, could be conceived as a trait or a skill set. What participants attribute to traits might be explained by strategies learned, interpersonal skills developed, or insight gained.

Insights from work such as Ross and Nisbett (2011) potentially add depth to understanding OE research based on reported outcomes. In some cases reframing from “personal traits changed” to “participants believed personal traits changed” might not make much practical difference. Perhaps changed beliefs are important. Either way the process I have described – becoming familiar with research on attribution bias and re-evaluating extant OE research – is more onerous than accepting past research at face value.

Barrier 4: Re-evaluating extant research by unpacking trait-based nomothetic OE research

A more scientifically defensible approach to OE based personal development must contend with persistent assumptions that more or less standardised OE programs offer universal benefits. The idea that a whole generation of youth – actually boys – were lacking what challenging outdoor experiences could offer, was explicit in early Outward Bound rhetoric as “the decay of modern youth” (Katz & Kolb, 1968, p. 12). Different anxieties about youth infuse some more recent program rhetoric (Brookes, 2015), but the idea of treating whole groups based on popular beliefs about “kids today” can still be discerned in OE marketing and research that focusses on group averages (cf. Bergeron & Rivard, 2017). In the following marketing

material, for example, there are at least echoes of the original Outward Bound concerns about a generation of soft youth:

Survive in the real world. Succeed in real life. We believe that nothing prepares kids for real life like the real world. And that bumps to the body and bruises to the ego early on in life make them stronger and harder to break later. Life is full of obstacles. Knees will get grazed. Egos, bruised. Sometimes, it will all feel like too much. But it's not about being too strong to fall. It's about being tough enough to get back up. (The Outdoor Education Group, 2017)

Approaches to neo-Hahnian OE framed around anxieties or concerns about the qualities or character of a generation of youth (Brookes, 2015) lent themselves to nomothetic studies that surveyed participants for trait-based outcomes. I reviewed research which purported to find trait-based outcomes across whole groups, and research which purportedly failed to find such effects, in previous work (Brookes, 2003a, 2003b). Attribution bias is one explanation for discrepancies between settled psychological science and OE research that purports to find trait effects, but there are other considerations.

One issue is study quality. Nomothetic OE research has long included studies limited by small group sizes and quality issues. Cason and Gillis (1994) noted problems with small sample size, potential confounding influences, and other technical considerations, although they implicitly accepted that OE impelled the emergence of worthy personal traits. Hattie et al. (1997) rejected some candidate studies for their meta-analysis as low quality, and judged most of the balance as medium quality. Twenty years later Scrutton and Beames (2015) reviewed 22 quantitative studies and 6 meta-analyses and found recurring problems with sample size, questionnaire design, and potentially confounding variables. Becker et al. (2017) reviewed peer-reviewed journal articles reporting research which measured outcomes of OE programs, in English and German, and found the quality of quantitative studies to be low.

Meta-analyses have attempted to compensate for small sample size. The meta-analysis conducted by Hattie et al. (1997) is often cited as evidence that outdoor adventure programs effectively achieve personal growth, expressed as trait changes, across groups or populations. A decade later in *Visible Learning* Hattie (2008) included outdoor learning in a larger compilation of meta-analyses of education. Hattie et al. (1997) is one of the most cited OE articles, if not the most cited, and continues to be frequently cited (by my count on Google Scholar cited over 300 times from 2016).

There are reasons to view the findings of Hattie et al. (1997) and Hattie (2008) cautiously. Shanahan (2017) advised readers to use Hattie (2008) only as a resource that pointed to the original studies, but not to trust the analysis itself, because of serious errors. That review was kind in comparison to Bergeron (2017), which made broadly similar criticisms from a statistician's perspective and concluded:

In summary, it is clear that John Hattie and his team have neither the knowledge nor the competencies required to conduct valid statistical analyses. No one should replicate this methodology because we must never accept pseudo-

science. This is most unfortunate, since it is possible to do real science with data from hundreds of meta-analyses. (Bergeron, 2017, p. 8)

Hattie et al. (1997) was not only a meta-analysis, but also conventional literature review that contributed usefully to the field, albeit possibly lacking critical distance from Outward Bound. However, the recent explicit critiques of Hattie (2008) align with more general doubts about meta-analysis as a method in educational research (Kulik & Kulik, 1989), and in social sciences more generally (Brannan et al., 2016).

Methodological criticisms go some way to resolving conflicts between what oft-cited nomothetic research purports to show, and what psychological science has established is possible. Critiques of educational meta-analyses are relevant to OE. But the limitations of individual studies are perhaps less important than a recognition that situationist understandings attend to how individuals respond to OE situations and the educational contribution of such experiences; which is quite different from the “black box” approach which looks for outcomes as proof OE “works.”

One notable variation of the “black box” approach to trait development draws on quasi-scientific humanistic psychology assumptions (see Millikan, 2006; Seaman et al., 2017). Humanist psychology is a special case of a lay entity theory of personality, which posits an essential self. Growth is seen as an actualisation of a true self (cf. Daniels, 1988; Geller, 1982). In this variant OE programs develop personality by facilitating emergence of existing, but latent traits. Humanistic explanations resolve the otherwise contradictory notion that traits are fixed, by definition, but can be changed by an OE program (Brookes, 2003a).

For a time, neo-Hahnian OE adopted psychologised self-actualisation theory (Millikan, 2006; Seaman et al., 2017), but although that approach provides a plausible explanation for how traits, normally fixed, could change as part of a maturation process, it fails to keep OE within the bounds of scientific plausibility. Seaman et al., (2017, p. 15) observed: “It is unclear to us whether ‘experiential learning’ as a general perspective can usefully contribute ... given its ongoing association with ideas from humanistic psychology which *elsewhere have been abandoned* [emphasis added].”

Barrier 5: Non-trait-based approaches, such as self-theory explanations of behaviour, are demanding

I began this article with the observation that working through the implications of established situationist social psychology required an understanding of the same. Alternatives to neo-Hahnian approaches require additional background knowledge. Robust findings in self-theory research (for example Dweck, 2000, and subsequent work) provide one rewarding, but demanding, line of inquiry for better founded OE theory. Self-theory research examines how individuals respond to challenges or setbacks by considering assumptions embedded in self-talk, in particular the extent to which individuals understand their behaviour to be shaped or bounded by entities presumed to be fixed, such as traits or intelligence, or amenable to incremental change depending on effort and strategy. Overwhelmingly,

incrementalist self-talk predicted success better than entity self-talk. Importantly self-theory is learned, plastic behaviour, not a trait (Dweck, 2000). One possibility is that OE programs framed in terms of character traits risk amplifying entity self-theories to the detriment of some participants. Implications of self-theory research problematise some still-influential shibboleths of early neo-Hahnian outdoor education:

1. that programs focus on groups or cohorts (because individuals differ in their self-theory),
2. that challenging experiences can lead to the actualisation of hitherto undeveloped traits (because of the risk that entity based theory will be reinforced), and
3. experience is developmental, which is to say always positive and never detrimental (Katz & Kolb, 1968) (because both are possible depending on how experience is construed by an individual).

Self-theory research, which focusses on the cognitive foundations of responses to success or failure, rather than traits, points to a different understanding of how outdoor experiences could contribute to personal development:

1. a program which is beneficial for one student might not suit another, depending on what self-theories individuals draw on when facing success or failure,
2. developmental self-theory can be successfully taught, but does not emerge automatically from challenges, and
3. an OE program could either enhance or degrade individual cognitive responses to success and failure.

Dweck summarises self-theory research as follows (“intelligence” can be interpreted broadly here – she goes on to apply self-theory to other personal qualities):

We found that students’ mindsets—how they perceive their abilities—played a key role in their motivation and achievement, and we found that if we changed students’ mindsets, we could boost their achievement. More precisely, students who believed their intelligence could be developed (a growth mindset) outperformed those who believed their intelligence was fixed (a fixed mindset). And when students learned through a structured program that they could “grow their brains” and increase their intellectual abilities, they did better. Finally, we found that having children focus on the process that leads to learning (like hard work or trying new strategies) could foster a growth mindset and its benefits. (Dweck, 2015)

The mindset Dweck refers to is not a trait – it is a *self-theory* which can be detected, monitored, and acquired. She observed her approach has been misconstrued in some cases, and is not comparable to the self-esteem movement, nor to positive psychology, and is not simple advocacy of “effort.” Some OE researchers could have mistakenly treated Dweck’s growth mindset – which is explicitly cognitive and antithetical to traits – as a non-cognitive trait (for example Richmond,

Meerts-Brandsma and Sibthorp, 2016). Although presented heuristically as a dichotomy, in practice:

(1) we're all a mixture of fixed and growth mindsets, (2) we will probably always be, and (3) if we want to move closer to a growth mindset in our thoughts and practices, we need to stay in touch with our fixed-mindset thoughts and deeds. (Dweck, 2015)

Work which has shown that individuals who draw on an entity theory of self – those who attribute performance in challenging situations to an essential self, defined by traits – are at a disadvantage when confronted with new and difficult tasks compared to those who look for ways to improve on the next attempt. Self-theory can be changed by educational interventions (Dweck, 2000; Plaks et al., 2009), which implies OE programs could indeed contribute helpful interventions, provided it was understood that participants enter a program already having different self-theories and will respond differently to a program. At the same time, self-theory research problematizes curriculum premised on reinforcing trait attributions.

Dweck's (2000) work contributes to a scientifically defensible approach to personal development in OE, particularly when considered in combination with equally robust findings on situational influences on behaviour. OE programs could provide powerful and distinct opportunities for individuals to understand how who they are is shaped by self-theory, by situations, and by how they construe situations. However, it would be facile to advocate such an approach without acknowledging the magnitude of the shift entailed from character-trait based thinking, and the knowledge base professionals would require.

The paradigm shift

The main tenets of work which should have transformed how OE researchers and scholars understand the educational potential of OE programs for personal development were well established decades ago. Dweck (2000) summarised mature research as did Ross and Nisbett (1991) almost ten years earlier. Discredited trait-based approaches to OE research and theory continue to figure prominently in the OE literature, while what by now should have been twenty years of development elaborating how OE situations influence behaviour, how participants construe or re-construe outdoor situations, and the role of situation-based curriculum in shaping beneficial self-theories and self-insight has been, at best, piecemeal. At worst, OE research remains the captive of unscientific beliefs about character traits. There is no imperative for OE practice to be informed by science – perhaps folk theories about character have served a purpose – but the barriers I have discussed explain, but do not excuse, OE research for a collective failure to follow the science towards what should have been a paradigm shift in those areas of OE concerned with personal development.

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Declarations

Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

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Andrew Brookes Ph. D. is an Adjunct Associate Professor at La Trobe University. He worked in outdoor education and outdoor guiding before moving to the former Bendigo College of Advanced Education (later part of La Trobe University), where he researched and taught outdoor education for almost three decades.