Steering a course towards Eudaimonia: The effects of sail training on well-being and character

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1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
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25
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46
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60

Steering a course towards Eudaimonia: The effects of sail training on well-being and

character

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1

Abstract

Sail training voyages have been shown to enhance self-constructs and inter- and intra-personal skills. It is suggested through this case study approach with twelve 14 year-old crew participants that such an experience contributes towards well-being and character development in *emerging adulthood.* An audit of voyage-based experiences generated an inventory of 58 authentic activities and participants completed questionnaires immediately post-voyage (T^1) and six months later (T^2) to rate the significance of each activity. The highest rated activities reflected Maslow's lower order of needs with a two thirds correspondence at T^1 and T^2. Helming (or steering the vessel) was ranked as the most significant activity by participants in both time periods, although participants had questioned their ability to do this before the voyage. It is suggested that helming activates cognitive, psychomotor and affective domains in an authentic adventure education experience that contributes to hedonic well-being and may provide a course towards Eudaimonia.

Key words

Sail training, well-being, character, adventure education, youth transition

Introduction

A case study of a five-day sail training voyage involving twelve 14-year-old crew participants aboard the sail training vessel *James Cook*[1] is presented here. The purpose of the study was to investigate the subjective *significance*[2] of voyage-based activities, to consider how these activities may contribute to the developmental outcomes identified in previous sail training studies and to inform future operating practices aboard this vessel.

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[1] The STV *James Cook* is operated by the Ocean Youth Trust North, www.oytnorth.org.uk a charity providing 'adventure under sail' for 12 to 25 year olds.
[2] The term *significance* is used here in its literal sense without statistical connotations, inferring a more in-depth exploration of the importance of activities.

2

Sail training is a type of adventurous outdoor activity in which, in addition to technical sailing skills, participants normally experience beneficial outcomes, such as an increase in self-concept, self-esteem, social confidence, and inter- and intra-personal skills (see, for example, Gordon, Harcourt-Smith, Hay & Priest, 1996; Rogers, 2004; McCulloch, McLaughlin, Allison, Edwards & Tett, 2010). It 'is a modern phenomenon with deep historical roots' (McCulloch, 2015, p.236). We propose that these types of outcome contribute towards participants' *well-being* and which may be indicative of *character* formation and development.

In their global study aboard a range of vessel types McCulloch et al. (2010) found that such beneficial outcomes were sustainable beyond the voyage experience. Recent studies have demonstrated the utility of sail training outcomes; for example, a study of five sail training participants during and after an eleven-day sail training voyage found that networking and relationship outcomes contributed to participant engagement (or re-engagement) with learning and education (Henstock, Barker & Knijnik, 2013). A study of a ten-day voyage found that participants enhanced their *resilience*: 'the ability to react to adversity and challenge in an adaptive and productive way, …considered crucial to healthy development' (Hayhurst, Hunter, Kafka & Boyes, 2015, p.40), and that this enhanced post-voyage resilience was maintained for five months.

In reviewing the literature to inform the conceptual framework for this study there are recurring themes in the demands and challenges for children's and young people's personal and social development, in particular, the descriptions of John Dewey (1859 – 1952) and Lev Vygotsky (1896 – 1934). These themes resonate today in the debate about how contemporary educational policy prepares (or fails to prepare) individuals for the transition from childhood to adulthood. The context for this study considers these older texts, current propositions for well-being and character education, the present–day demands and challenges facing children

3

and young people and how participation in a sail training voyage may contribute to the

formation and development of *well-being* and *character*.

Context

This paper relies upon the 'waypoints' to be found in the literature to develop an

emergent interpretive narrative.

The physiological changes experienced by today's adolescents are probably very

similar to those of the past however contemporary society presents these demands and

challenges in a more complex setting. Society has, over the last eighty or so years, tended to

respond to these changing demands and challenges through educational doctrine intended to

meet broader societal needs (Pring, 2004), however, that some areas of cognitive and human

development (such as personal and social development, and literacy and numeracy) remain

difficult issues for policy makers and educators implies that the evolution of educational

policy may not have been entirely successful in meeting the 'broader societal needs'.

In 1930s America Dewey, amidst the transition from a community-based economy

and lifestyle to urban industrialised occupations, cautioned educational policy makers against

the 'tendency to emphasize technical details and [losing] sight of the broader societal

function of education' (Quay & Seaman, 2013, p.2). In 1930s post-revolutionary Soviet

Union Vygotsky's research on human cognition and development was conducted 'within a

society that [had] high hopes for the ability of science to solve the pressing economic and

social problems of the Soviet people' and 'the elimination of illiteracy and the founding of

educational programs to maximise the potential of individual children' (Cole & Scribner,

1978, p.9). That the personal and social development of children and young people remains a

contemporary issue suggests that we still have a lot to learn.

In Great Britain, the post-1945 educational policy was complemented by a 'vigorous

social movement …developed on the margins of youth work, outdoor recreation, further

education and industrial training' (Roberts, White & Parker, 1974, p.11). Roberts et al.

(1974) describe this movement as 'character-training' but they fall short of providing a

detailed definition of character only acknowledging that 'each youngster will carry [their]

own personal likes, dislikes, attitudes and beliefs through a course and into [their] subsequent

life' (1974, p.11) but that '[following] their training most young people feel 'different', more

mature, self-confident, and better capable of handling relationships with others' (1974,

p.148). This character-training was provided by a number of independent organisations, such

as The Outward Bound Trust (established in 1941), Brathay Trust (established in 1946) and

the Sail Training Association (established in 1966); delivering a variety of residential courses

for young people often involving adventurous outdoor pursuits. 'In Britain by 1969 as many

as 25 per cent of young people in the 14-20 age range had attended a residential non-

vocational course, in most cases based upon outdoor pursuits' (1974, p.15) with many

participants being sponsored by their employers to develop them as employees. This suggests

that compulsory education had prepared young people for entry into employment but that

these 'new employees' required further investment, by their employers, in their *character*.

More recently British educational policy is seeing a re-emergence of character

education to develop character before entry in to employment (Arthur, 2005). However, Ryan

(in Arthur, Harrison, Kristjánsson & Davison, 2014, p.4) suggests that the 'educational

failure to teach about and promote good character has left democratic societies increasingly

vulnerable in terms of lacking the social glue necessary to flourish and promote the common

good'. The current situation is far from clear.

Mortlock (1994) argues that 'adventure' should be a core component of the British

curriculum towards the formation and development of 'an awareness of, respect for, and love

of self, …others, [and] the environment' (1994, p.18); an argument that is being made today.

Mortlock's description of 'adventure' has much in common with Roberts et al.'s (1974) *character-training*.

Academic research reaching across many aspects of adventure-based activity and the personal and social development of children and young people has delivered greater clarity about the nature and extent of outcomes. Adventure education remains largely outside of compulsory education, increasingly coming within the domain of youth work. Some secondary research has synthesised studies in to adventure-based outcomes to further Mortlock's argument for the inclusion of adventure as part of the curriculum; see, for example, Hattie, Marsh, Neill & Richards (1997); Rickinson et al. (2004), and Fiennes et al. (2015).

Over the years the labels and descriptions of specific adventure-based outcomes have emerged and the academic research has been able (or has claimed to have been able) to differentiate between the multi-layered dimensions of personal and social developmental outcomes.

Sail training has been subject of such focussed investigations, for example, Capurso & Borsci's (2013) quantitative, quasi-experimental voyage-based study measured self-concept using only the *Social* and *Competence* sub-scales (of the six sub-scales available) of Bracken's (1992) Multidimensional Self-Concept Scale (MSCS)[3]. However, many studies fail to explore how these very specific components are consciously or unconsciously[4] used by individual participants in their trajectory towards *well-being* and forming and developing *character*.

Many of these outcome distillates have now been consolidated and re-branded within the definitions of *well-being*, however, it is unclear as to how these multi-dimensional

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[3]The MSCS is one of a range of valid and reliable tools to measure child and adolescent multidimensional self-concept (Anstey, 1999; Bracken, Bunch, Keith & Keith, 2000).

[4] In this context the word 'unconsciously' is used to describe how an individual may utilise outcomes from their experience instinctively or without thinking about them.

6

components are, or may be, laminated to create and strengthen *well-being* and *character*. This is, we would argue, critical to personal and social development.

Well-being contributes to 'how young people feel about their lives as a whole, …their relationships, the amount of choice that they have in their lives, and their future' (The Children's Society, 2015, p.3); resonating with Roberts et al.'s (1974) description of the *purpose* of character-training but the relationship between the two concepts is unclear. The Children's Society sets out a framework for the connected concepts of well-being (subjective or hedonic, and psychological or eudaimonic) that contribute to self-reported well-being (2015, p.9).

Hedonia and eudaimonia have both been interpreted to mean 'happiness' (see Waterman, 2008), however, as Diener points out, there has been 'little theoretical progress in understanding happiness […] in the two millennia since the time of the Greek philosophers' (referring to Wilson (1967) in Diener, 1984, p.542). These two constructs for happiness have led to two research traditions and tensions between the language of philosophy and psychology (Biswas-Diener, Kashdan & Conti, 2009). Hedonic happiness, or hedonia, is defined as 'the belief that one is getting the important things one wants, as well as certain pleasant affects that normally go along with this belief' (Kraut (1979) cited in Waterman, 2008, p.235). This type of subjective well-being (see Diener, 1984) may be short-lived or can be associated to a specific event or setting where personal needs are satisfied. Eudaimonia, or eudaimonic happiness, is a complex construct that can be traced back to the writings of Aristotle and 4th Century BC (Waterman, 2008). Eudaimonia is the feeling of 'being where one wants to be, doing what one wants to do' (citing Norton, 1976, p.216) 'where what is wanted is to be taken as being something worth doing' (1976, p.236); or 'living life in a full and deeply satisfying way' (Deci & Ryan, 2008, p.1). There is a view that eudaimonic living may necessarily involve '[experiencing] hedonic enjoyment; however, not all hedonic

7

enjoyment is derived from eudaimonic living' (Waterman, Schwartz & Conti (2008) in Deci

& Ryan, 2008, p.3). Diener proposes that 'eudaemonia (sic) is not happiness in the modern

senses of the word, but a desirable state judged from a particular framework' (1984, p.543).

Well-being contributes to preparing children and young people for the rigours of adulthood

and making a contribution to society (Aked & Thompson, 2011); other related concepts are

citizenship (see Keating, Kerr, Benton, Mundy & Lopes, 2010) and *social capital* (see

Finkelstein & Goodwin, 2006; Beames & Atencio, 2008; Hargreaves & Fullan, 2012). This

narrative 'journey' seems to have become more of a circumnavigation – bringing us back to

the propositions of Dewey and Vygotsky.

Today's journey towards adulthood, especially for those from disadvantaged socio-

economic backgrounds, is more difficult, yet '[their] 'needs' will remain very much as they

are now but at a later chronological stage in life. …The need to establish individual identity,

self-assurance and skills in inter-relationships will remain central tasks for adolescents and

young people – even if deferred by a few years' (Gutfreund, 2000, p.8). The Cabinet Office

(2014, p.76) describes this developmental phase as *emerging adulthood* or 'a new stage in the

life course of many young people, who are experiencing longer, more complex paths to full

adulthood and independence' and which has potential to undermine the young person's well-

being.

The review of the literature provides sufficient basis to investigate further the role for

adventure education and outdoor learning and, in particular, sail training as they relate to

personal and social development and well-being outcomes, and the formation and

development of character.

The study

Methodology and research design

The methodological approach to this study makes the assumption that the operation of the *James Cook* falls within the scope of extant sail training research and that participant crews gain sustainable benefits within the general description of *well-being*. The purpose of the study was to explore the participants' experience of a sail training voyage, in particular the subjective *significance* (see footnote 2 *ante*) of the activities they experienced; it was construed as a small-scale pilot study to inform a larger research project. The identification of a *significant* activity (or activities) would enable the development of practice to further improve the quality of the subjective experience and, thereby, the outcomes arising from the voyage experience. This is an approach proposed by Pike and Beames (2013): 'to learn more of the activities themselves, how they evolved, the various ways in which people experience them, and the underlying factors that control and facilitate them' (2013, p.160).

A sail training voyage is the sum of a complex interaction of *environmental*, *people* and *activity* components, however, the causation of beneficial outcomes eludes the existing research. Capurso & Borsci (2013, p.16) describe this complex interaction as a 'black box'; in that 'we know the [inputs] and we know the [outcomes], but the causal processes between the two – the genuine causation – are unexplained' (Morrison, 2009, p.123).

In this present study a qualitative approach was taken to observe how these individual (but complex and multi-layered) voyage components are manifested in the overall experience. Denscombe describes this approach as a *case study*; an approach that 'works best when the researcher wants to investigate an issue in depth and provide an explanation that can cope with the complexity and subtlety of real life situations' (2013, p.55).

The voyage-environment is contained within the physical characteristics of the vessel and is very much constant but it is affected by the ever changing environment outside of the vessel, such as the weather and sea state. The *people* component is complex and is forever changing as each voyage is made up of combinations of sea staff (both full-time and

volunteers) interacting with different crew participants as individuals and collectively as the 'crew'. Individual participants each construct and re-construct their understanding of the voyage experience, their subjective experience; and this understanding is anchored to their own *personal foundation of experience* (see Boud & Walker (1990) cited in Boud, Cohen & Walker, 2010, p.11).

An audit of voyage-based activities developed an inventory of fifty-eight activities across all aspects of voyage-life; These are grouped under seven descriptors: *2.1 Arrival, 2.2 Initial Briefings, 2.3 Safety, 2.4 Seamanship, 2.5 Sail Handling, 2.6 Living aboard, and 2.7 General/ Training workshops*. These *authentic* (as opposed to manufactured or contrived) activities are integral to the day-to-day life on-board and the voyage experience; representing the planned structure and the catalysts for the interaction between the people and environmental components.

The environment, people and activity considerations allowed a questionnaire to be developed to explore post-voyage feelings and establish the subjective *significance* of the voyage-based activities. The study questionnaire comprised three sections; sections 1 and 3 used open questioning to elicit subjective reaction and feelings about the voyage. The inventory of activities was presented in section 2; this allowed participants to rate subjectively the *significance* of each voyage-based activity using a five-point (0 to 4) Likert scale (see, for example, Bryman, 2012, p.166). The everyday meaning of *significance* was intended to allow participants to differentiate the subjective effect of voyage activities.

The questionnaire was first completed by participants at the end of the five-day voyage (T^1) supervised by the researcher whilst the participants were still on-board the vessel. Six months later the questionnaire was then completed in the school setting (T^2); supervised by a teacher acting as 'gatekeeper'. The questionnaires were completed anonymously and there was no analysis of individual T^1 and T^2 responses.

10

The participants

The twelve 14-year-old participants for this study, comprising nine girls and three boys, were drawn from a pre-existing voyage booking with a local secondary school[5]. The selection of participants was completed outside of the control or influence of the study; each participant had won their berth for the voyage through an in-school competition. This competition was designed by the school and involved aspiring crew to write a case as to why they should be allowed to sail; entries were then considered by a panel of teachers and berths awarded on merit. The competition had been finalised before the approach to participate in this study was made to the school. Although participants were from the same year-group only three had a pre-existing friendship (this study did not investigate the pre- and post-voyage *situation* of participants, such as friendship groups, engagement in learning or academic achievement).

The ethical approach to this study considered 'whether there is *harm to participants*; whether there is a *lack of informed consent*; whether there is an *invasion of privacy*; whether *deception* is involved' (Diener & Crandall (1978) cited in Bryman, 2012, p.135, italics in original). Participants, their parents or guardians, the school and the operating charity were provided with information about the study; written consent was obtained and it was made clear that participants could withdraw from the study at any time. It was agreed that participants and their school would remain anonymous; however, the charity gave consent for their details to be included in any reporting of this study. This approach was approved by the Ethics Panel at the University of Cumbria.

The voyage

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[5] The school is described by Ofsted as a 'smaller than average-sized' secondary school with 853 pupils (as at June 2013) aged 11 to 16 years. In their *2013 Ofsted Report* the school was graded as 'good in all areas'. This was the school's third annual voyage aboard *James Cook*; this type of residential experience is incorporated into whole-school activities.

11

The voyage took place between noon Monday and noon Friday aboard the sail

training vessel *James Cook*, a 70'steel-built ketch, and we covered a total distance of 125

nautical miles in the North Sea. The sea staff for this voyage comprised a professional sea-

faring Skipper with a vast experience in sail training; the First Mate was a professional

commercial sea-farer acting as a sail training volunteer; a full-time volunteer Bosun; two

volunteer Watch Leaders (including the researcher as a participant-observer) and a teacher

from the school as the participants' group leader.

Each voyage aboard *James Cook* begins with the routine practices that are founded in

the culture and traditions of the vessel, comprising the introduction of the sea staff,

familiarising participants with the boat and safety briefings. The day-to-day operation of the

James Cook engages both sea staff and crew in the domestic arrangements of living within

the physical confines of the vessel, preparing the vessel for sea and all sailing activities.

Analysis

An *interpretivist* approach was taken to the analysis of collected data, both within and

as a comparison between the T^1 and T^2 responses; in a process described by Rogers (2004,

p.16) as *evaluation research*. In adopting this approach it is important to recognise that the

researcher's interpretation of responses may not necessarily reflect the respondents' original

meaning; that the analysis reflects the researcher's own attitudes, values and beliefs in

providing this interpretive narrative (see Denscombe, 2013, p.237).

The response to the inventory of activities (section 2) was the main focus for the

analysis. The free text responses (sections 1 and 2) were then examined for context and any

explanation for the *significance* of the six highest rated *significant* activities from the

responses. A detailed discussion is provided for the most significant activity – *helming*; and a

commentary is provided for the remaining highest ranked significant activities. It is

recognised that the responses comprise a small dataset and that any inferences drawn might

have limited extrapolation and scope; but they may inform operational practices aboard this vessel.

The questionnaire invited participants to rate the *significance* of each activity from the inventory of activities using a five-point Likert scale (0 to 4). For T[1] responses some participants did not rate all of the activities they had experienced and some T[2] respondents rated activities that they had not experienced[6]. To allow for a direct comparison between activities a *significance rating* for each activity was calculated using the equation:

$$\frac{Sum\ of\ participant\ ratings}{Highest\ possible\ sum\ of\ participant\ rating} = Significance\ rating$$

An activity that was not conducted during the voyage should rate as 'zero'. The lowest possible *significance rating* for an activity that was conducted, that is all participants rating an activity as 1, was 0.25; the highest possible *significance rating*, that is all participants rating an activity as 4, was 1.00. The calculation of the *significance rating* allowed for the inventory of activities to be ranked in order of significance; this then allowed for the comparison of T[1] and T[2] rankings.

The six most *significant* T[1]activities are detailed in Table 1.

[Insert Table 1 near here]

The *Initial familiarisation of James Cook*, *Man Over Board (MOB)*, *Introductions for crew and sea staff* and *Using the pin rail; using OXO (pin rail and cleats) and round turn and two half hitches (fenders)* are four activities found in the routine practice of the first hours aboard the *James Cook*. These activities contribute to alleviating pre-voyage anxieties, and prime and motivate participants for their experience in this novel environment creating the *milieu* for the voyage. They correlate to the lower order *needs* (that is *physiological*, *safety* and *belonging*) of Abraham Maslow's (1970) *Hierarchy of Human Needs* (see, for

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[6]These anomalies were not investigated within the scope of this study.

example, Reece & Walker, 2000, p.100). Maslow proposed the importance of satisfying these lower order needs to allow the individual to move towards, what he described as, 'self-actualisation' creating the conditions for optimising individual potential within the experience (Mortlock, 1994, p.115).

It has been the researcher's experience that many crew participants appear anxious at the prospect of *Helming – steering the James Cook*; for a young person steering and taking control of this 70' yacht, albeit always under the supervision of the sea staff, makes for a challenging but empowering activity. The characteristics of this activity are discussed in greater detail later.

Meals – eating together around the table takes place around the saloon table (a fold-out table large enough to accommodate all eighteen crew and sea staff), and is the focus for much of the non-sailing social interaction. The simple label used to describe this activity fails to acknowledge the complexity and multi-dimensional nature of this social interaction and its potential affect (and it does not consider the nutritional value of the meals). Zaborsky (2011, p.9) cites Wrathall (2009) in suggesting that this type of social activity is absent in many young peoples' lives, quoting a teenage sail training participant: 'It was nice to eat the food at the table like we did. I've never done that'. Sommer, Sturmer, Schmullerovich, Martin-Loeches & Schacht propose that sharing 'a pleasant meal seems to elicit or modify emotional, cognitive, and social processes' (2013, p.1).

The analysis of the T^2 responses found only small variances in the *significance rating* for each activity leading to some movement in the overall ranking of the activities; four activities remained in the top six (Table 2).

[Insert Table 2 near here]

Helming – steering the James Cook maintained its top ranking in both T^1 and T^2 responses as a significant activity; We propose an explanation of this activity's significance later. *Night sailing – sailing during the hours of darkness* and *On watch – keeping lookout for hazards, i.e. navigational marks, other vessels, lobster pot/ fishing net markers* improved their respective T^1 to T^2 ranking, and are both activities that are closely associated to *helming*.

The *Initial familiarisation of James Cook*, *Introductions for crew and sea staff* and *Meals – eating together around the table* retained their subjective *significance* six months after the voyage experience. These lower order *Maslow* activities are very much social-oriented activities; they are part of the introductory ritual at the beginning of the voyage experience and, we would argue, have an important role in establishing and developing voyage-based relationships.

The subsequent analysis of the free text responses focusses upon the significance of *Helming – steering the James Cook*. Helming as a theme in these free text responses was cited as being one activity the participants thought they would not be able to do (T^1: n=5, T^2: n=3); and an example of an activity that had made them 'feel good' (T^1: n=7; T^2: n=5). Cooking and eating together was another activity that made participants 'feel good' (T^1: n=5; T^2: n=7).

Although this study did not measure voyage outcomes there were some responses that are worthy of mention to demonstrate a recognition, by some participants, of future application of their experience:

T^1 responses:

"I have learned that it (sic) better to take risks & try out new things than not to do anything at all"

"I CAN do challenges. I don't have to be afraid of what lies after that challenge"

(*emphasis in original*)

15

"I am able to do anything if I set my mind to it"

T^2 responses:

"That I am only one person. I can't be what everyone wants"

"I have more enthusiasm and stride to complete everything"

"That if I have more confidence in myself I will most likely be able to do the things I want

to do"

What is it about *helming* that makes it *significant*?

Helming describes the act of steering of the vessel, and *helmsman* is the non-gender specific term for the person steering a vessel. Within the hierarchy of a vessel the captain (or skipper), the helmsman and pilot are key roles that ensure a voyage between port A and port B is conducted safely and efficiently. To be 'at the helm' has found its way in to non-seafaring contexts and is now used to describe corporate leaders or captains of industry; it is suggestive of a 'holder of power'. On board the *James Cook* any close-quarters helming, such as leaving or arriving at a mooring or anchorage, is only undertaken by the Skipper (or other senior qualified members of sea staff) which reinforces the suggestion of 'power'.

Whilst crew participants may be familiar with shore-based activities that have been adapted and transferred to the on-board setting, such as cooking and eating a meal or sleeping in a bunk, the nature of helming *situates* it solely within this setting, with its characteristics founded in the working practices aboard sailing ships through the ages. Helming presents the helmsman, as a 'newcomer', with the opportunity to self-evaluate their 'value of participation' in the on-board community towards *becoming* a helmsman and an active participant of that community (Lave & Wenger, 1991, p.111). Helming a vessel towards a waypoint or destination may be considered by the 'newcomer' as a form of work; Dewey drew a distinction between play and work, in that work 'is enriched by the sense that it leads somewhere, that it amounts to something' (1910, p.164).

16

The *James Cook* is very much founded in the 'recreational or yachting' tradition with its 'roots in the kind of leisure sailing that was developed during the late 19th and 20th centuries' (McCulloch, 2004, p.186), however, it could be argued that the culture and traditions of any type of sailing activity, regardless of technological advancements, may be found in the seafaring culture and traditions of antiquity (see, for example, Dunsch, 2012).

This study's inventory of activities used the term *helming*, which is a complex activity that engages a young person in steering the 70' steel-built ketch *James Cook*, by way of its one-metre diameter steering wheel, in open water as the vessel is exposed to external variables (such as the wind, sea state and tidal stream). In this instance, the activity began for each crew participant with their watch leader's introduction to the principle of steering the vessel (which may also include an explanation of the scientific principles of how the sailing vessel and its steering work). This is a mediated one-to-one activity comprising an explanation and demonstration leading to hands-on practice 'at the helm'; this process is a form of 'guided participation' (Rogoff & Angelillo, 2002).

On taking the helm the course-to-steer towards the intended destination (or waypoint) was explained with reference being made to the compass bearing and other visual cues, such as landmarks ashore. The type of vessel and its course, the direction and strength of the wind, tidal stream and the sea state combine to generate a constantly moving environment on which the helmsman exercises his or her control. The vessel could be described as being in a state of equilibrium when the sails are set to optimise the effect of these external factors as it is steered towards the desired destination. This equilibrium is only maintained through the constant adjustment of the helm; the helmsman needs to make 'active compensatory movements' of the wheel to remain on course and 'against the boat's movements in order to keep their balance' (Stadler, 1984, p.69).

17

For landlubbers it is important to know that these external influences on the vessel are ever changing, the wind may change its direction, or increase or decrease in strength, requiring the helmsman to constantly monitor and adjust the 'helm' to stay-on-course. This activates cognitive, psychomotor and affective domains in this complex activity. The 'newcomer' helmsman often goes quiet as they focus on their task, assimilating the sensations of the activity and apply their understanding of the watch leader's explanation and demonstration. Often, after a relatively short time, crew often observe the appearance of a broad smile reflective of enjoyment or an indication that the activity is within a participant's comfort zone. In addition to any supervisory feedback from their watch leader as the helmsman gets to grips with the task of steering, subtle changes coming from the vessel provide the helmsman with other types of non-verbal feedback. For instance, as the vessel sails 'off' its course, altering the efficient movement of the vessel through the water, the vessel's attitude to the waves or degree of *heel* changes; visual cues, such as the bow moving across the horizon or changes in its position relative to landmarks or other vessels; and audible cues as the sails become less efficient and begin to flap. These sensations and cues all provide non-verbal feedback to the helmsman and activate *reflection-in-action* like 'a hawk in the mind constantly circling, watching and advising on practice' (Bolton, 2012, p.33) as they 'make active counter movements with the rudder against the yawing of the boat' (Stadler, 1984, p.70). It is noticeable that when the helmsman, even those who are experienced and accomplished practitioners, loses his or her focus and stops monitoring their performance it is difficult to stay on course.

Sailing has been described as an *optimal experience* and having the potential for creating *flow*: 'It is what the sailor holding a tight course feels when the wind whips though her hair, when the boat lunges through the waves like a colt – sails, hull, wind, and sea humming a harmony that vibrates in the sailor's veins' (Csikszentmihalyi, 2008, p.3); and

18

'[constitutes] an expression of eudaimonia. …experienced only in connection with a limited

set of specific sources, such as activities associated with self-realization and expressions of

virtue' (Waterman, 2008, p.237). This view introduces an emotional dimension, as an

example of an *aesthetic* experience '[that] is emotional but there are no separate things called

emotions in it' (Dewey, 1934, p.42 cited in Quay and Seaman, 2013, p.68).

Helming is a mediated 'side-by-side' activity that empowers the helmsman, regardless

of their sailing experience, and activates a complex mix of the cognitive, psychomotor and

affective domains in an authentic work-based experience contributing to hedonic well-being

but, more importantly, may provide a course toward eudaimonia.

Conclusion

The contemporary journey to adulthood for many young people is complex; this, we

would propose, requires a greater emphasis on supporting their well-being, and forming and

developing character, albeit unobtrusively. If this is lacking in compulsory education or it is

not readily available to those entering the workplace, then other opportunities should be

exploited that offer scaffolded support to enable young people to realise their potential.

This case study used a simplistic design to investigate the subjective significance of a

range of activities encountered by twelve 14-year-old crew participants on a short sail

training voyage. The authenticity of the activities experienced in the naturally occurring

environment of an 'adventure under sail' may go some way in explaining this significance,

and the socially-oriented outcomes. A position supported by Newman, Griffin and Cole

(1984) as they propose that the presentation of an activity in a social context will always be a

'social construction' (p. 175) and that it generates a different response when it has arisen

from circumstances that have occurred naturally (p. 188).

Although 'significant' (in the non-statistical sense of this term) activities were

identified (for this particular crew, on this particular vessel, for this particular voyage), this

19

study was limited by the methods used and sample size; it failed to explore a rationale or

secure an explanation for this 'significance' with the crew participants and can be seen as a

pilot or reconnaissance study as part of a more extensive research project. The study has,

however, informed the practices aboard *James Cook*; it has confirmed the importance of the

introductory sessions and safety briefings in establishing the setting for the voyage, and has

provided a renewed focus on the role of helming.

Many studies of adventure and outdoor education have focussed on the identification,

isolation and measurement of outcomes; the operation of many of these specific outcomes

and how they may contribute to well-being or the formation and development of character is

not well understood and would benefit from further study. Such studies should extend beyond

the isolation and measurement of outcomes and must investigate how these outcomes are

'laminated' by individuals to develop their sense of well-being and character. To accomplish

this, we would argue that studies should consider 'the social context of individual

achievement and to develop methods for studying the real complexity of life rather than

trying in vain to isolate human specimens for study' (Rogoff, 1990, p. 4).

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21

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Indication of Tables 1

	Activity	*Significance Rating*	*Ranking*
2.1d	Initial familiarisation of *James Cook*	0.97	=1
2.3c	Man Over Board (MOB)	0.97	=1
2.4k	Helming – steering the *James Cook*	0.97	=1
2.2b	Introductions for crew and sea staff	0.95	=2
2.2i	Using the pin rail; using OXO (pin rail and cleats) and round turn and two half hitches (fenders)	0.95	=2
2.6b	Meals – eating together around the table	0.95	=2

Table 1: Activities with the highest (T[1]) 'significance' ratings

Indication of Tables 2

	Activity	*Significance Rating*	*Ranking*[1]
2.4k	Helming – steering the *James Cook*	0.90	1 (=1)
2.4l	Night sailing – sailing during the hours of darkness	0.88	=2 (=3)
2.6b	Meals – eating together around the table	0.88	=2 (=2)
2.4j	On watch – keeping lookout for hazards, i.e. navigational marks, other vessels, lobster pot/ fishing net markers	0.86	3 (=4)
2.1d	Initial familiarisation of *James Cook*	0.85	=4 (=1)
2.2b	Introductions for crew and sea staff	0.85	=4 (=2)

Table 2: Activities with the highest 'significance' ratings (T^2)

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[1] The value in brackets is the T^1 *ranking*.