

Christie, Mark ORCID: <https://orcid.org/0000-0002-4246-0895> and Elliott, David ORCID: <https://orcid.org/0000-0003-4790-2354> (2024) From a dark place to a blue space: open water swimming transformed our lives. Sport in Society .

Downloaded from: <https://insight.cumbria.ac.uk/id/eprint/7702/>

Usage of any items from the University of Cumbria's institutional repository 'Insight' must conform to the following fair usage guidelines.

Any item and its associated metadata held in the University of Cumbria's institutional repository Insight (unless stated otherwise on the metadata record) may be copied, displayed or performed, and stored in line with the JISC fair dealing guidelines (available [here](#)) for educational and not-for-profit activities

provided that

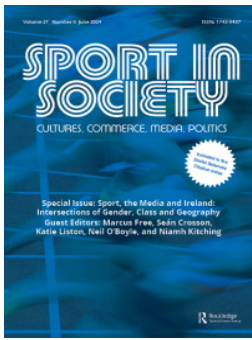
- the authors, title and full bibliographic details of the item are cited clearly when any part of the work is referred to verbally or in the written form
- a hyperlink/URL to the original Insight record of that item is included in any citations of the work
- the content is not changed in any way
- all files required for usage of the item are kept together with the main item file.

You may not

- sell any part of an item
- refer to any part of an item without citation
- amend any item or contextualise it in a way that will impugn the creator's reputation
- remove or alter the copyright statement on an item.

The full policy can be found [here](#).

Alternatively contact the University of Cumbria Repository Editor by emailing insight@cumbria.ac.uk.



Sport in Society

Cultures, Commerce, Media, Politics

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/fcss20

From a dark place to a blue space: open water swimming transformed our lives

Mark A. Christie & David Elliott

To cite this article: Mark A. Christie & David Elliott (28 May 2024): From a dark place to a blue space: open water swimming transformed our lives, *Sport in Society*, DOI: [10.1080/17430437.2024.2357231](https://doi.org/10.1080/17430437.2024.2357231)

To link to this article: <https://doi.org/10.1080/17430437.2024.2357231>



© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 28 May 2024.



[Submit your article to this journal](#)



[View related articles](#)



[View Crossmark data](#)

From a dark place to a blue space: open water swimming transformed our lives

Mark A. Christie and David Elliott

Institute of Health, University of Cumbria, Lancaster, UK

ABSTRACT

This study focused upon two individuals who used open water swimming (OWS) as a therapeutic means of recovery from a significant period of acute mental ill-health, in which both had attempted suicide. A case study approach was utilised to explore the participant's backstories, mental ill-health, and subsequent recovery. Semi-structured interviews were conducted in the field where each individual typically participates in OWS. In addition, the field researcher kept reflexive notes on his interaction with each swimmer. Both case study profiles—with very different causal factors that led to attempted suicide - are detailed and parallels drawn between the individuals' experiences of mental health recovery and the role of OWS within this. Whilst findings are not generalisable, they provide important insight into the potential therapeutic role of OWS in alleviating the impact of acute mental ill-health in relation to suicide and how OWS facilitated a more positive future for individuals. The study also explores how and why such enhancements to mental health might occur.

ARTICLE HISTORY

Received 6 August 2023

Accepted 11 May 2024

KEYWORDS

Attempted suicide; suicide ideation; mental health recovery; open water swimming; case studies

Introduction

Suicide is one of the world's leading causes of death with an estimated 700,000 suicides occurring per year (WHO 2023). In the UK alone, there were 5642 deaths (10.7 per 100,000) attributed to suicide in 2022 (ONS 2023; Baker 2022). Moreover, for every life lost through suicide there are many more failed attempts (WHO 2023). For example, data from the UK shows that annually, approximately one-percent of the population will attempt suicide (NHS Digital 2016). Suicide is a multifaceted phenomenon which includes behaviours such as suicide ideation, suicide planning, suicide attempts and the act itself (Burke et al. 2018; Turecki and Brent 2016). The potential mediators of suicidal behaviours are numerous. In affluent countries, mental disorders such as long-term depression, anxiety, poor impulse control, alcohol dependence and post-traumatic stress disorder are implicated in suicide risk (Fernandez-Rodrigues et al. 2022; Hawton et al. 2013). Suicides also occur in moments of crisis due to an inability to deal with life stresses, for example financial problems, relationship breakdown, prolonged physical ill-health/impairments and historic abuse (Hawton and van Heeringen 2009; WHO 2021; Orsolini et al. 2020).

CONTACT Mark A. Christie  mark.christie@cumbria.ac.uk

© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

Suicide prevention is now a major goal for local authorities and central government (NHS Digital 2016) and as such, numerous interventions are available to those experiencing such tendencies. Contemporary methods include pharmacotherapy, electroconvulsive therapy (ECT), psychotherapy, dialectic therapy and the provision of telephone help lines (Hofstra et al. 2020; van der Feltz-Cornelis et al. 2011; Zalsman et al. 2016). Whilst generally effective, such approaches are not without issue. For example, Hofstra et al. (2020) found that suicide prevention strategies often require multilevel, holistic interventions that can be time consuming and costly (van der Feltz-Cornelis et al. 2011; Vasiliadis et al. 2015). It is also evident that numerous barriers exist that can prevent long-term adherence to such programmes (Valente and Saunders 2004; Wilson et al. 2021). In addition, some can provoke negative side effects (Zalsman et al. 2016). For example, ECT can cause headaches, nausea and short-term memory loss (Chen et al. 2022). It is also evident that many of those experiencing suicidal thoughts are hesitant to seek and/or undergo treatment (Holmes et al. 2021) and even if willing to engage, many find it difficult gain access to some of the recommended interventions (Vancampfort et al. 2019).

One promising approach to suicide prevention in terms of widespread dissemination and negligible side-effects, is physical activity (Vancampfort et al. 2019). There is an abundance of evidence showing that physical activity (PA) can alleviate many of the mediators for suicide risk; for example, depression and anxiety (Schuch et al. 2016; Stubbs et al. 2018), post-traumatic stress symptoms (Rosenbaum et al. 2015), sleep disturbance (Kredlow et al. 2015), alcohol abuse (Hallgren et al. 2017) and chronic somatic conditions (Pedersen and Saltin 2015). Regarding the direct impact on suicide, a review conducted by Vancampfort et al. (2019) concluded that PA can provide protective effects for adults who conform to the recommended activity guidelines. Likewise, Ning et al. (2022) report that PA can alleviate suicide ideation in a variety of population groups and also plays an important role in reducing suicide planning and attempts. There are a number of mechanisms that could account for such positive outcomes. For example, exercise-induced physiological responses such as increased levels of endorphins, increased blood supply to the brain, improved neurotransmitter function (e.g. serotonin, dopamine, and noradrenaline) and reduced levels of proinflammatory cytokines and C-reactive proteins are thought to reduce anxiety and improve mood (Khorvash et al. 2012; Grasdalsmoen et al. 2020). Psychosocial mechanisms are also likely implicated given that PA can function as a distraction, improve self-efficacy, and offer a basis for greater social interaction (Simon, Powell, and Swann 2004; Sharma, Madaan, and Petty 2006; Ahmad 2022).

Recently there has been an increased recognition of the positive role natural outdoor spaces can play on mental health. It is now generally accepted that mere exposure to natural environments can have a positive effect on a variety of mental health and well-being parameters (Leavell et al. 2019). Numerous theories have been advanced to explain this relationship (Capaldi et al. 2015). Stress Reduction Theory (Ulrich et al. 1991) for example postulates that natural environments automatically induce a stress reduction response, particularly when locations are void of noise, air pollution and crowds. According to The Biophilia Hypothesis (Kellert and Wilson 1993) humans retain an innate need to 'connect to nature' (CTN) and when this need is met, positive psychological reactions are provoked. Another is Attention Restoration Theory (Kaplan 1995) which hypothesises that natural environments simply offer a respite from the more chaotic urban areas whilst also offering pleasant stimuli that can distract from life stresses. Engagement in nature as a source of intrinsic pleasure can also provide the opportunity to satisfy basic psychological needs such as competence, relatedness,

and autonomy (Lee, Maillet, and Grouzet 2022). This ultimately leads to increased Eudaimonic and Hedonic wellbeing and feelings of transcendence (Passmore and Howell 2014; Pritchard et al. 2020).

Whilst mere exposure to natural environments can prove beneficial, being physically active in such locations can have additive effects (Jenkins et al. 2022; Leavell et al. 2019). PA amid natural environments can be classified into two separate, yet interrelated concepts, namely Green Exercise (GE) which refers to the act of performing exercise in natural green spaces (GS) such as forests, countryside, and parks (Gladwell et al. 2013) and Blue Exercise (BE): PA performed in natural aquatic locations - otherwise designated as Blue Spaces (BS) - such as the sea, rivers, and lakes (Murray and Fox 2021). To date, there has been a stronger focus on GS and GE as a vehicle for improving health and well-being. However, the available literature on the effectiveness of BS and BE is encouraging (e.g. Foley 2015; Foley and Kistemann 2015; Britton et al. 2020; Thompson and Wilkie 2021). One form of BE that has seen considerable growth in recent years is open-water swimming (OWS). Recent UK data estimates that two-million people participate in this activity annually (Swim England 2019). OWS can offer many of the benefits associated with exposure to natural environments as well as those derived from being physically active (Haefner et al. 2017; Grellier et al. 2017; White et al. 2019; Denton and Aranda 2020; Loureiro et al. 2021; Thompson and Wilkie 2021). However, there are additional factors that could make OWS particularly helpful for those experiencing mood disorders. For example, water immersion has been found to decrease pain perception, induce relaxation, and enhance mood states (Becker 2009; Broach and Dattilo 1996). The cold-water temperatures associated with outdoor swimming can also positively influence the endocrinal system and mental health (Knechtle et al. 2020). Evidence has indeed shown OWS to have a therapeutic effect on those experiencing mental issues such as depression and anxiety (Van Tulleken et al. 2018; Massey et al. 2020; Massey et al. 2022). Such findings have led Christie and Elliott (2023) to assert that OWS might be uniquely placed as a means to enhance psychological outlook, life enhancement, social interaction, feelings of relaxation, and overall mental well-being. As such, it is possible that OWS might prove to be an effective intervention for those at risk from suicidal behaviours.

In summary, PA provides an approach to suicide prevention that may redress some of the issues surrounding the more conventional interventions. Whilst research is currently limited, it does appear that PA in natural outdoor environments might offer a unique, potentially cost-effective means of alleviating suicidal tendencies. Of the available BS activities, OWS has various characteristics that might prove to be particularly beneficial. To date, there has been no attempt to research the impact of OWS on suicide. This investigation therefore presents a case study examining two individuals who had very contrasting circumstances leading to the attempted suicide events, and who believe OWS to have been pivotal to their mental health recovery. It is hoped that the outcomes of this study will lead to a greater focus on the possibility of using BE, and in particular OWS as possible a suicide prevention strategy.

Method

Participants

Two individuals with troubled mental ill-health histories, including attempted suicide were interviewed regarding the role OWS played in their mental health recovery. Full profiles are provided later with each case study.

Research approach

This study adopted an intrinsic case study methodology which is characterised by consideration of a specific focus of interest and so meets the criteria suggested by Lazar, Feng, and Hochheiser (2017) in providing unusual, distinctive, and 'edge' narrative. Case study research is most readily associated with naturalistic inquiry which has an emphasis upon the actions and experiences of specific people and their social context (Zucker 2009). The aim is to provide any combination of factual (e.g. biographical/historical), descriptive, interpretive, and explanatory narratives, whilst avoiding claims of generalisable findings (Yin 2014). It typically employs fieldwork, allied to specific data collection tools, facilitating rich, insightful descriptive and interpretative data about specific social phenomena (Armstrong 2010). If more than one 'case' is involved (as here), case study research can also be comparative (Merriam and Tisdell 2015), with cases selected for their uniqueness, i.e. where only a limited pool of available research participants could potentially be involved.

Given the potential for this study to produce guidelines for practitioners, it embraced both inductive and deductive data analysis. As such, the researchers acted as the primary conduit of data collection and analysis, embracing an inductive strategy to search for meaning and understandings, resulting in a narrative that richly describes a contemporary phenomenon within real-life contexts (Merriam and Tisdell 2015); but also, a deductive approach allowed for the data analysis to be informed by existing theory. The overall case study methodology followed the emphasis upon naturalistic inquiry research protocol proposed by Stake (1995), namely posing research questions; adopting appropriate data collection methods; describing the cases; use of participant verification; analysis of findings from a case and domain perspective; writing up using an emic perspective based upon personal interactions with each case participant and context; and facilitating trustworthiness throughout the process to ensure research rigour (independent scrutiny of the field researcher's interpretations).

Ethical considerations

The field interviewer (MC), himself a wild swimmer of two years' experience, noted the social media posts of both participants on two UK OWS Facebook sites each of which boast over 100,000 subscribers. Ethical approval for the study was first obtained through the university's ethics committee, and subsequently, the participants were formally approached *via* Facebook messaging as regards the study's intentions. Both were amenable to discussing their respective 'stories' of mental health recovery and the key role of OWS within that journey. After consent was obtained from both swimmers, MC composed appropriate risk assessments, and arranged to meet each participant with friends present and/or at public locations to swim and undertake the data collection process *in situ*. Both participants had the option to withdraw at any stage of the study process, but neither chose to do so. Before, during and after the research, the interviewer checked for any psychological distress caused by the research process and directed them to guidance in the participant information sheet (PIS) as regards sources of mental health services if required.

The researchers were faced with a dilemma over whether to use pseudonyms given that both requested their real names to be used in the research. Mondada (2014) suggests, where anonymity is unlikely to be guaranteed due to aspects of participant testimonies being recognisable, employing pseudonyms are unlikely to serve their typical purpose in promoting confidentiality. In addition, Tilley and Woodthorpe (2011) add that pursuing the use

of pseudonyms may perversely undermine participant's autonomy and lead their testimony to become disconnected from their real lives, and strip away the ownership of their own words, thus impacting the perceived authenticity of such biographical accounts. With this in mind, we respected their request.

Data collection

In-depth interviews by the field researcher (MC), excerpts from participants' personal social media posts, references to medical histories, participant and researcher photographs, and GoPro footage with commentary by both interviewees in the locations where they typically swam were employed. These methods were deemed an optimal means of promoting important insights into the utility of OWS in promoting mental health recovery, especially in terms of the 'how' and 'why'. An iterative approach, whereby the researchers engaged with relevant literature before, during and post-data collection, highlighted an awareness that method and analysis occur together in the construction of case study research (Zucker 2009). Questions were loosely structured in advance of each interview, whilst the GoPro footage was more spontaneous.

The first swim and interview involved Kathleen at Seaham Marina, NE England (Figure 1), which offers a small beach area approximately 60 yards wide by 100 yards long at low tide, and swimming opportunities within a protected harbour wall. This is Kathleen's most frequently used OWS location, with relatively easy access from the car park adjoining the beach. On this particular weekday lunchtime, the beach was busy, not surprising given the warm sunshine. Sea temperature was a relatively cold 14°C. During the swim, lasting 25 min, Kathleen used the GoPro camera to record her thoughts and feelings associated with being present in this her favoured blue space, including discussions in the water with a friend and MC. Kathleen was then interviewed post-swim in a quiet location near a cafeteria overlooking the marina's harbour.



Figure 1. Seaham beach (photo by Kathleen).

Mark was interviewed in a similar way at a publicly owned lake in Lincolnshire, UK (Figures 2 and 3), where he regularly dips or undertakes short swims with friends. It was a bright day with a lake temperature of 19 C. Mark, a competent swimmer, used the GoPro to record an emotive account of how he feels connected to water, and nature more generally. Following the twenty-minute swim with MC an interview was conducted on the shore in view (but not in earshot) of passers-by.



Figure 2. MC with Mark (first left) at the lake in Lincolnshire. Source: Author.



Figure 3. Mark undertaking his cold water daily affirmations. Source: Author.

Interview data was recorded by means of digital audio recording devices and subsequently transcribed by MC using Atlas-ti software. Interview duration was 59 min (Kathleen) and 66 min (Mark), with a further 15 and 11 min of GoPro discussions respectively. As befits fieldwork, MC kept a reflexive diary, and GoPro photographs of the site/participants (with appropriate consent—[Figure 4](#)); although participants' testimonies are prioritised in the subsequent narrative. Permission was also granted by both swimmers to use selected, self-directed posts from their respective Facebook feeds to use in the study narrative. This also included access to specific photographs each participant offered for possible inclusion to support their testimonies. Although no formal records of medical history were sought or obtained, participants spoke freely of prior and current medications to provide contextual information.

Data analysis

Thematic Analysis was utilised to assess the data. This involved data familiarisation, coding, and generating themes; then reviewing themes, defining themes, and finally writing them up (Braun and Clarke 2019). Both the 'insider' researcher (MC) and 'outsider' (DE) identified patterns and themes independently, thus offering an emic and etic perspective on the data obtained. The 'outsider' is an experienced researcher who does not, and never has participated in OWS and as such, does not have any preconceived notions and/or particular attitudes towards the activity. Being detached from the OWS community should increase impartiality and be a counter to any bias the 'insider' researcher might unconsciously hold. The first stage involved MC and DE reading the transcripts three times for familiarisation purposes, identifying initial trends, before comparing notes. The second (coding) stage adopted an initial data driven (e.g. 'resilience', 'pain relief', 'coping', 'nature'), then theory-driven (e.g. 'restoration', 'stress reduction', 'nature connectedness', 'phenomenon of hope'), process. *In vivo* codes captured more salient and evocative elements (Charmaz 2006). Third, codes were grouped into relevant themes. In stages four and five, following discussions, core themes were confirmed ([Table 1](#)), which informed the final stage of developing the analytical narrative, thus promoting both rigour and trustworthiness (Nowell et al. 2017). To aid data analysis, relevant literature was reviewed, specifically in terms of gaining a greater understanding

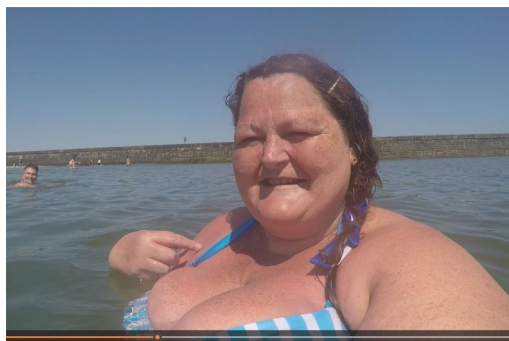


Figure 4. Seaham Marina swimming (GoPro footage, MC in background).

Table 1. Core themes, Sub-themes, exemplar quotes.

Core themes	Sub-themes	Core theme example
REGENERATION & RENEWAL	Enlightenment, embracing life, learning to live, new perspectives on life, realism, sense of purpose, transforming, life affirmations, growing, healing, reinventing self; plugging in to life; banishing or containing darkness	'I was covered from head to toe in clothes. The more camouflage there was, the better at the time and now it's like if people don't like what they see, they don't have to look that and turn away. If people have a negative opinion, they can own that. I don't need to own their negativity.... they can keep that to themselves.' (Kathleen)
CONNECTIVITY TO NATURE & PEOPLE	Healing places; positive social interactions (caring, support, friendships, belonging, non-judgemental); wildlife; immersion in blue spaces; elements; hedonism; eudemonism; nature as a healer	'The people at the Marina are just so supportive. It's definitely my favourite place, coming down here, it's just total enlightenment and humanity, it's brought my faith back that people are alright and people can be kind. Not everybody's that way inclined. So, finding something that's physical, and fun, and people accepting you freely is definitely a starting platform to recovery.' (Kathleen)
COLD WATER AS THERAPY	Unique properties of water; water sensation; pain relief; stress relief; new social circles/groups; nature connectedness; spirituality; energy; physical and mental therapeutic benefits of immersion; childhood recollections	'Dipping in the sea is different to dipping in a lake, and dipping in a river is different to dipping in the sea or lake. But water is the flow in you that you're connecting to and it's that connection with water that is key - it always delivers, I love it all... it's that connection with that living body of water, that energy, connecting to you - you would never get in a swimming pool or shower.' (Mark) 'I get pain relief, which is incredible. I feel able-bodied in the water. I don't need people to support, I can move around freely, so, I get a bit of independence and empowerment, the joy of being in the sea and open air, and swimming with other people, feeling part of the community... I just feel so happy in the water. Some days I've come in and been so depressed, but by the time I get in the water, I just let it go with the tide...' (Kathleen)
SELF-CARE	Resilience; 'growing'; OWS & nature as a healer vs. medical interventions; work-life balance; support networks; coping strategies; life 'reset'; acceptance; rekindling positive childhood memories to inform the present	'...(I) put together a system to help get back to full strength and discovered the benefits of cold water and brought that in as my own personal system to get me well again. It's become an intrinsic part of who I am and what I do now, along with those other tools that I learned or invented for myself, (like) my positivity bat for pulling a thought out, crushing it up, throwing it in the air and knocking it out of the ballpark' (Mark)

of issues relating to mental health recovery, suicide risk and the utility of OWS in promoting good health outcomes. To further promote confirmability and dependability, transcripts were offered to participants (Xerri 2018). *via* all these processes, triangulation of data was effectively promoted throughout.

Case study 1: Kathleen—part one: background profile

Kathleen is 59 years old, and a single parent of two children. She holds a Bachelor's degree in Public Health, an FE teaching qualification, a Diploma in Nurse Training and

has part completed a Master's degree in Public Health. She has experienced a long history of both physical and mental ill-health, rooted in childhood, and a range of medical interventions that are perceived as being ineffective. The co-morbid conditions Kathleen continues to experience include lipoedema, lipidaemia, chronic asthma, severe hypermobility, fibromyalgia, osteoarthritis, lymphedema, diverticulitis, persistent migraines, skin writing disorder, anxiety, and depression: *'Chronic pain and acute pain depend on what each day brings'*. She experiences low self-confidence, although much improved since her darkest days: *'I see jobs and contemplate applying and just never have the confidence. I really feel that they would see my poor mobility as a barrier.'* The medical condition that poses most challenge to Kathleen is lipoedema which is characterised by a symmetric build-up of adipose tissue (fat) in the legs and arms, and recognised as a chronic, yet less well known, medical condition almost exclusive to women (DermNet NZ Trust 2023). It typically originates during puberty and/or other periods of women's lives where hormonal changes are prominent (Torre et al. 2018) for example, during pregnancy and menopause. Whilst people may appear to present with obesity—a pan-body condition—in lipoedema, fat occurs primarily in the limbs and is usually unresponsive to weight loss interventions (Warren Peled and Kappos 2016). Swelling, bruising easily, and low to severe irregular patterns of pain are also common symptoms (Warren Peled and Kappos 2016). The lack of medical understanding of the condition (e.g. causal triggers), and limited medical remedies—there is no current cure, according to NHS England (2020)—leads to physical pain (when standing/walking) and emotional stress, compromising mental health. Managing the condition involves a range of approaches (NHS 2020) including exercising regularly (e.g. seated aerobics, swimming, walking, resistance exercises), and trying to maintain a 'healthy' weight. Other options include use of compression stockings to ameliorate pain and aid movement, emollients for skin dryness, and mental health support (e.g. counselling, cognitive behavioural therapy). Kathleen has had the condition since her teenage years, which resulted in associated long-term mental health difficulties, including panic attacks, chronic depression, and acute social anxiety, the latter compounded by fears over stigmatisation and poor self-image due to her size and the distorted physical appearance the condition is associated with:

I was always really conscious about my body... they call it 'tree trunk legs' for a reason because it (feels) like I'm lifting concrete weights, when lifting me foot... it's so heavy, it's unbearable.

The numerous panic attacks Kathleen has experienced in her life *'...used to affect my asthma'*, for which she sought medical support. Sometimes the asthma triggered the anxiety problems, *'...because I couldn't walk a few steps without being really out of breath.'* The medication finally helped control the asthma, *'...but it took a long time to get it right'*. Kathleen had a problematic childhood, a victim of persistent bullying at school. She fondly recalls the seaside as offering her sanctuary and comfort from the daily torment. She had the *'comfort'* of being part of a *'great'* family. Her first day at primary school is etched on her memory, running home ahead of her siblings after being in tears all day. Within the family unit growing up, although it held comfort and support, she nonetheless struggled to *'speak up for herself as I didn't like confrontation'* and was *'very sensitive'* to any perceived negativity from her sisters and brothers. These feelings of insecurity and

lack of personal agency were compounded by struggling to ‘*manage the fails*’ in her formative years. Kathleen also experienced physical pain and undiagnosed autism which she is only now, belatedly in her fifties, getting assistance with. As her mental health worsened in her teenage years, she became addicted to Solpadeine ‘...*because I was in pain, but like I felt a bit of relief when I was taking it*’. She was weaned off this addiction, and instead was prescribed anti-depressants. Although she has never self-harmed, she attempted suicide at the age of 16 following a sexual assault and years of bullying at school:

I couldn’t live with that, so by the time I hit 16, I just had enough of life and I just didn’t want to exist anymore.

Suicide risk is closely associated with poor physical health and impairments, but also sexual and physical assault in childhood (Hawton and van Heeringen 2009). Kathleen’s suicide attempt was interrupted by a family member before any significant harm was done. Her parents never knew about the assault, which followed two years between the ages of 13–15 years where she was regularly abused by a colleague from her father’s workplace, ‘*so, I couldn’t speak freely as I would have (done)*’. A second sexual assault when aged 20—involving rape—occurred at the hands of another perpetrator when Kathleen’s own daughter was just two years of age. Somehow, she recalls, she managed to ‘*get over things, learnt to live with things*’. But problems continued, with post-natal depression at 18 after she gave birth to her daughter. Stoically, she recalls, I was ‘*a great mum, I wasn’t bothered about me, so long as she was okay*’. She suffered post-natal depression again when she had her second child five years later, who presented with multiple health concerns, including ADHD, social anxiety, and partial deafness, which led to exhaustion in her dealings with medical experts:

...and then I was arguing (with professionals) the whole time that he was autistic, they was saying he wasn’t, so by the time he got to his teens, he was diagnosed with autism, but it took a lot of fighting.

Despite these struggles, which took their toll emotionally, and risked further suicidal ideation, Kathleen is proud of bringing up not only her first son, but also her second a few years later. Even then, there was family trauma, with her 30-year-old cousin dying of cancer, and who refused to die until she had seen the newborn—‘*she held him, and she died the next day*’. Kathleen’s aunt died 6 weeks later, harshly doubling the grief she felt at the time, and compounding her chronic depression. Relationships with men have proven difficult, as Kathleen felt she always chose ‘*the wrong person*’, and, as a result, ‘*ended up getting hurt*’. She was determined however to raise her children successfully, as a single parent, and is proud of this achievement and her ‘*amazing*’ children. However, further trauma followed, as her daughter, when 16 years old, was raped, causing Kathleen to suffer a nervous breakdown.

She has limited praise for her interactions with medical support over many years, finding the service ‘*inconsistent and very hard*’ to navigate. Talking therapies, whether in person or *via* phone, did not work, and counselling has been a mixed experience, as ‘*...if you don’t gel with the counsellor straight away, then it will just go ‘boom’. I just disconnect*’. Similarly, her food habits were poorly managed and uninformed, going without

food for days or eating food low in nutritional value. Many years later, she accessed free nutritional advice *via* a Facebook OWS group, which helped control her typically out of control weight. She now feels more informed about food choices and the downsides of going without food for days.

The recent Covid pandemic lockdowns (2020–2021) were a trying experience, and one that brought Kathleen to another very low ebb, to the point of suicide ideation resurfacing; there was a risk that improvements in lifestyle and incremental gains in mental health were rapidly unwinding:

I couldn't have gone any farther down. It would have just been the end. The only way I could go, if anything, was up.

Family members rallied round and supported Kathleen through this acutely difficult period, without which, she felt, *'if I'd been on my own, I wouldn't be here'*, highlighting the crucial role of strong support networks in reducing future suicide risk in recovering adults (Sun and Long 2013). Lockdown, however, also presented an unanticipated opportunity to break free from her desperate situation, despite *'losing all hope'*. As restrictions eased, whilst scrolling on her mobile phone Kathleen noticed a picture of her sister sea swimming:

...I was like 'I'm jealous!', crying, and saying 'I'll never be able to do it'. And from that, I think it's a pre-contemplation from seeing that picture and setting it in my mind, and it took a while, but then like it just kept like eating away (at me). But if I didn't (take that step), I wouldn't be alive, so it's changed my life completely.

Part two: OWS as therapy

For Kathleen, the life changing impacts of OWS were almost instantaneous. However, before experiencing its therapeutic properties, she had to overcome a major hurdle in accessing the beach, and even leaving her own home—for physical, but also for psychological reasons (fear of people's reactions, low self-esteem). After much cajoling from her sister, and despite considerable self-doubt, she eventually took the action required to escape her home *'prison'*:

...how I got off the sofa and put my own shoes on - I don't know where the strength come from. I said, 'I'll probably break your fucking car - if anything else your car might not move because I'm so big!' (Then) I kept falling over on the beach, I had both my sisters helping us. Then I realised we got there it was a female swim group and I had to get down on the sand. Well, I didn't know how, so I just let myself go, then everybody went, 'oh are you alright?' But to me, if I hurt myself, I'll laugh rather than cry. So, I was lying there laughing me back off. And then I was thinking 'how the fuck am I going to get back up?' so I couldn't really take in any of the group breathing work activity, I was just thinking 'oh fucking hell, I've gotta go off this sand...' I don't know how, but I got up, shuffled down to the water, eventually dropped my sticks, fell over just as I was going to get in. And then, in the water, it was like 'oh fucking hell, I'm alive!' (laughs).

The sheer joy on Kathleen's face on entering the water on the day of interview was clear to see (Figure 5), as the field researcher noted in his reflective account (Diagram 1).



Figure 5. Kathleen a ‘free spirit’ at Seaham Marina (Kathleen’s own photo): *“Two years cold water swimming and I’ve found me. I no longer wish I could sleep an eternity. Taking 2023 by storm.”* (January 2023; Facebook post).

Diagram 1.

I could sense the excitement Kathleen had for sea swimming as soon as we approached the car park adjoining the Marina. There were no inhibitions as she stripped down by the car to reveal her swimsuit, so eager was she that her friend and I were left struggling to keep up to get changed! Across from where we parked (handily for no charge), was a metal staircase leading to the beach. Although it seemed awkward for Kathleen to navigate, she soon alighted onto the sand. We found a spot to place our kit bags in the centre of what seemed a fairly busy beach, with people of all ages enjoying the sunshine, and a few taking to the water for a dip rather than a swim per se. As I glanced around, there was little in the way of any obvious staring directed at Kathleen – in fact, quite the opposite: people’s reactions appeared to be warm and friendly, with at least three people, clearly known to her probably from prior visits, asking how she was. I got the GoPro camera out of the bag and popped my towel down for an easy visual of where the bags were positioned from the water. I turned around expecting to see Kathleen and her friend close by, but they had already walked the thirty or so paces into the water. It was as if the sea was a magnet for her, with its therapeutic support, physically, mentally, even spiritually: she was utterly relaxed in the water, joyful, laughing, exhilarated, screaming ‘I’m free!’ This was fully encapsulated when she asked her friend to hold the GoPro as she dived under for a few seconds before resurfacing with a huge grin.

Kathleen precisely articulated the sense of freedom, independence, and hedonism she derived from sea water immersion:

I get pain relief, which is incredible... I’ve moved whereas I’m not able-bodied out of the water. I feel able-bodied in the water. I don’t need people to support (me), I can move around freely, so I get a bit of independence and empowerment. I get the joy of being in the sea and open air, and swimming with other people, feeling part of the community - and

I just feel so happy: I can move, do what I want! Some days I've come in having been so depressed, but by the time I get in the water, I just let it go with the tide... let it float away. So, I get relief from the daily pressures, and anxieties, which is just the best thing ever. I feel like a child. I get to be a child again.

These physical and psychological impacts reported by Kathleen are in keeping with a long history of research regarding water immersion as a form of aquatic therapy, and its propensity to deliver a wide range of positive cardiopulmonary, respiratory, and musculoskeletal impacts, but also decreased pain perception, greater relaxation, and enhanced mood states, derived from very specific properties inherent in water: viscosity, density, hydrostatic pressure, buoyancy, and thermodynamics (Broach and Dattilo 1996; Moffatt 2017; Stubbs 2017; Tanaka 2009). OWS, with the colder water typically associated with the activity, has also demonstrated a wide range of physical and mental benefits (Huttunen, Kokko, and Ylijokuri 2004; Christie and Elliott 2023; Massey et al. 2022). In respect of the latter, Kathleen recalled childhood experiences of the seascape as offering a refuge from the *'torment'* of the school bullies, and how the sea therefore in the current day accentuated positives and the *'nice feelings'* she held back then when escaping to the coast:

...I love watching the sunlight today here, when it's just dancing off the water like a little fairy sparkling on the seabed. It's amazing, isn't it? And I just love watching that. And it's like little fairy dust or fairies dancing on the seabed. I just love it. I know I'm a bit fluffy!

As such, she literally *'soaks in'* aspects of nature, including the sky, the smell of salt water, trees, birds, and other wildlife (including visiting dolphins), whereby the sea acts as her *'warm, comfy blanket'* in times of stress, *'hugging'* and *'embracing'* her: *'...and it doesn't matter about my size or the way I look.'* Kathleen's throwback to childhood memories chimes with emergent research supporting the notion that contemporary adult nature connectedness, and the associated hedonism (e.g. sense of freedom, pleasure, joy, excitement) and development of specific aspects of personal agency (e.g. self-esteem, self-control, social capital), is rooted in the positivity derived from childhood experiences (Rosa, Profice, and Collado 2018; Suszek, Kofta, and Kopera 2019; Thompson, Aspinall, and Montarzino 2008). The apparent nature connectedness Kathleen derived from OWS experiences chimes with more general research on how OWS benefits participants, whereby nature immersion promotes a transformative impact in people's mental health status (Murray and Fox 2021; Denton and Aranda 2020), and consensus that a major part of the appeal of OWS relates to its environment, with more powerful health impacts derived from physical activity in outdoor environments compared to indoors (Gladwell et al. 2013; Kajosaari and Pasanen 2021). Further, Kathleen referenced a general absence of stares, and/or *'sniggers'*, when she is on the beach. By contrast, indoor swimming is a setting full of anxiety provoking stimuli:

Because my legs look like melting candles and I'm not society's norm, they're not accepting of it, so there's a lot of stigmas around that. And when I've been in the (indoor) pools, people immediately look at who's coming in, don't they? So, I've had a lot of that and I've gone home crying and not wanted to do it or go back. So, coming down here, it's just total enlightenment and humanity, it's brought my faith back that people are alright and can be kind.

Whilst she continues to struggle with social anxiety, Kathleen has '*learned to live with it*', and acknowledges at times it might compromise friendships through fear of '*saying the wrong thing*'. However, she has found the Marina offers a supportive, non-judgemental milieu, a safe space, from which she derives strength through shared endeavours with like-minded female OWS enthusiasts, which helps open up conversations '*literally about anything*', in sharp contrast to her struggles to converse with therapists in clinical settings.

Part three: the here and now

Kathleen has achieved a degree of self-confidence that, although fragile, means that she no longer '*attends to*' sources of negativity regarding her size or appearance in everyday life, as well as when accessing swimming ('*...they're entitled to an opinion; I just don't need to hear it*'). She marvels at her journey from when she first tried OWS, '*covered from head to toe in clothes*' to hide her body, to the person who is not afraid to strip down into her swim costume in a car park and walk across the beach, to the comfort she derives from the sea's embrace. As noted by Bates and Moles (2022, 5), wild swimming is associated with:

a proximity to nakedness that is not found in many other social and spatial spheres... nakedness becomes essential and accepted, and the negative emotions we often associate with nudity, from shame to embarrassment, are washed away by the desire and necessity to get into the water.

She now regularly posts about her OWS experiences, and her mental health recovery journey, on OWS Facebook groups. A particularly powerful poem is featured in Figure 4. Despite the negative experiences of indoor pools, Kathleen has the self-confidence to attend the occasional spa treatment day, as she gets '*less agitated*', is '*more confident in my own skin*' and '*takes in less of people's opinions and stares now*', as opposed to previously when she was very focused on people's reactions. Although there are no local organised groups such as the nationally recognised female oriented 'Bluetits', Kathleen has found friendships by swimming with a small network of friends. However, as an apparent testimony to her renewed sense of self, she is enthusiastically trying to organise a swimming and singing choir, having had singing lessons (the instructor suggesting she should be a classical singer).

Since that awkward first attempt to get to the beach, Kathleen has enjoyed swimming all year round, with '*fun and laughter*' associated with summer swims, and, although winter swims are much shorter in duration, she finds that precious time in the colder conditions is even more useful in respect of pain relief, a finding supported by researchers including Kurniasari et al. (2022). Swimming in rain is not a deterrent—rather, it evokes even more in the way of nature connectedness:

It's just peaceful, you can see the little ripples of each raindrop, it's really nice.

If other, land-based exercise options, including walking, were suggested to her by health practitioners, Kathleen is dismissive, '*I'd tell 'em to fuck off, try living with my pain!*'. Her poor mobility, pain with each step, and risk from hypermobility of her knee

dislocating, are sufficient barriers. She rejects notions of other forms of support, such as mobility scooters, feeling it would rob her of her independence. However, importantly, Kathleen has found OWS is a mode of physical activity she thoroughly enjoys, which, given the overwhelming evidence on the link between regular exercise and reduced risk of non-communicable diseases as well as mental health, is of particular relevance to Kathleen given her ongoing multiple physical and mental conditions (Saqib et al. 2020). Her preference for BE may be a wise choice in the circumstances, given Nutsford et al. (2016) demonstrate BS can have a greater effect on positive mood states than GS. Similarly, BS can provide more positive social interactions, and higher levels of escapism in comparison to green spaces (Thompson and Wilkie 2021), possibly resulting from the very different sensory experiences in blue space - e.g. soundscapes, underwater fauna and flora, sensation of water immersion – impacts that Kathleen represented throughout her testimony.

She is starkly expressive about the role of OWS (*'it's therapeutic – you can't replicate that in a medical facility, can you?'*) compared to the help offered by medication. Without OWS to help her manage her multiple physical and mental ailments, she asserts:

...well, I'd be dead. I found I got darker and darker the more therapy I had, because I was reliving all of the trauma. And then going home and having to deal with them (traumatic experiences) on my own, in my own head, was like a time bomb waiting just to explode. So, talking to people down here, if I want to talk like I'm talking to you, freely, it's because I'm comfortable with myself to do it. But if there was a day I didn't want to talk, I wouldn't have to. But when you go there (clinic), you've got to talk about it and you feel pushed into it.

Kathleen now swims every week on a Thursday morning at her favourite swimming location of Seaham Marina. If she can get someone to transport her, she participates more often. She is open to other locations but needs her friends to 'recce' other options to ensure sufficient access. Proximity and safe access to blue space opportunities, amongst other factors, have previously been noted as prominent barriers for some OWS participants, particularly those with physical impairments/conditions (Christie and Elliott 2023). Nonetheless, Kathleen has never looked back from that first reconnection with sea swimming, which enables her to let any bad days and issues '*drift away with the tide*', refresh and start again with '*a new slate*'. Whilst still requiring medication, including anti-depressants due to the lingering pain associated with lipoedema, suicide ideation is never present. She has begun to embark on a potential PhD route and has volunteered for a local 'Wellbeing for Life' public health initiative. The present day continues to offer major challenges to navigate - her second son having had a recent suicide attempt himself aged 18, and poor physical ill-health (ulcerated colitis); and her first son with his own physical and mental ill-health (*'he barely leaves the house'*). But Kathleen feels she has the toolkit to cope and embrace a more positive future for herself and her immediate family; central to this newfound lease of life is her love of OWS (Figure 6):

I never have a normal day one way or another, but I'd not change anything. Life's experiences depict the future and make me a better person when I flip a negative to a positive...and I think now if I've had a bad day, as soon as I walk in the water, I feel it all just drifting away.

Lipoedema, fibromyalgia, osteoarthritis, hypermobility, fatigue, chronic asthma, lymphedema, diverticulitis, varicose veins, migraines ganglion to my withered hands trapped nerves bulling disc's, words to describe what causes me to crumble or stumble gasping to breath. Just me!

Churning goes the edge of pain...

Stabbing goes as the blades as lipoedema set in.

Legs look like you should not have eaten all that fat.

My diet is healthy, living for wellbeing, I hear you eat much as I am snarled at.

I am not that. Not just fat, let's talk about that.

Eyes weep my skin creeks. My bones crunch as the bones whine

My nerves are on edge as the pain is ingrained within every breath I take. Awake again during the night.

The knife of lipidaemia as I try not to shout out with the strain of the pain imprinted upon my legs.

I'm lying here in bed. No, do I sleep an hour or too.

I wake with sadness... Nor do I sleep the night through.

Every night, every waking minute

Twists the knife that stings with its bite...

My legs feel so heavy, and tears drain it: lipidaemia, and I. Sleep that is what I ask. 🤔

My legs - they are tangled with the strain...

Twisting at every dint and upon my skins uneven surface.

Tree trunk, you may say,

I listen, and jip lip it rises with anguish.

No, do I care how they are seen:

Pain is all I feel, weighted down heavy concrete. No freedom from the pain.

No pity do I need, no witty comments from you to me:

You see, the sea saves me!

Purpose and smiles laughter, my mind unwind from the pain, the tear, the sniggers, the stares,

I feel just me in the sea, not the list I wrote above for you to read...

Defined by so much, labels imprinted upon the surface of me.

Just labels you see as inside I shine with a wrath of humanity.

No, do I judge a book by a cover,

No, do I judge your opinion of me. You see, I believe again in *me*.

I know my heart is true to my care.

I pass back any judgement of me...

I ask only one thing: do you see me?

I am just *me*!

I'm not my disabilities or illnesses...

I do not pretend that without all that,

I would fit into society without a blink of an eye without a stare or a glare.

So, see me: see past the things that are imprinted upon me...

Look at the real *me*.

The person who tries hard to live with all that. The person who cares about you and me.

You, as the cold North Sea, helped me make sense of all that.

The cold North Sea holds me no different than you are me.

Its serendipity of happiness - vibrant and dark - sends its waves of beauty to me and you.

It helps me to forget that my body is weak, and my mind is struggling with all that.

Just me. I am, after all, just me: free in the sea.

Figure 6. Kathleen's poem about her multiple medical conditions and role of OWS in her life. Source: Author.

Case study 2: Mark—part one: background profile

Mark is 58 years old and lives in Lincolnshire. He ran a highly successful fishing tackle business with his partner of 19 years and became a millionaire with a property boasting five acres of land, including its own lake. At the time his mental health deteriorated, across a four-year period in his mid-forties, Mark was working seven days a week, *‘...and that was robbing me of way too much time and energy focusing on that’*, compromising his relationship with his partner. Previously, he had never suffered with anxiety or depression but:

I went through a bout of crippling anxiety and suicidal depression that took me to a very, very dark place over a period of time. These things layer up over years and you don't realise it's creeping up on you until it hits you.

Ironically, a move he thought would be positive for the family unit at the time, and especially for his young son – having [some relatives] permanently live at the property – was part of the catalyst of Mark's spiral towards taking his own life:

...and so, you've got those ready-made babysitters there, thinking it'd be like the *Waltons* (TV family drama). But of course, real life, it's not like that.... what happened is that whenever I had an issue with work that I would normally thrash out with my wife, but because her mum and dad were there, I started to internalise those issues and things which I'd never done before. I'd always been a person who, if I've got a problem, (I'd) face it, head on, talk about it, get it out. If I don't like something, or somebody, I'll say so.... I'd always been very forthright about being honest. And I started to push these issues and problems inside, and that was the key, because those things begin to fester and build up that emotion that you push inside, and you go on and you don't let it out. It has to go somewhere. Over time, that layered up and created those issues in my life, my relationship crumbled, I started to unplug.

This ‘unplugging’ resulted in Mark perceiving the celebratory act of his now 18-year-old son passing his driving test as another step in losing his self-worth, as *‘I wouldn't be needed driving him around anymore’*. Until his mental health difficulties, Mark had an *‘exuberance for life’* including a regular social scene where he was depicted as the *‘life and soul of the party’* (despite being tee-total) with sporting success as a sub-11 s sprinter, and even an appearance as one of twelve competitors on the popular 1990s *Gladiator's* TV show. Thus, he was perceived as *‘the last person that (people) would ever imagine would have got anxious and depressed’*. However, Mark soon disengaged from almost all aspects of his life, not going into the business, going on his motorbike, or working out in the gym, akin to *‘pulling plugs out’*. This had deleterious impacts on key aspects of his persona and lifestyle including upon self-esteem, self-image, friendships, exercise and eating habits, feeling valued, family, and socialising.

... and the more plugs you pull out, the more you diminish yourself until you end up as I did in that foetal position, wanting to pull the duvet over your head and draw the curtains and not connect with life, or anything at all... I just thought, I can't deal with this anymore. I cannot stand the thought of waking tomorrow again feeling this way. Never mind feeling this way for the next ten, twenty or thirty years. You know, Fuck that, I'm out of here. I'm done’.

Such feelings of hopelessness, and diminished self-worth, are predictors of suicide (Hadzi-Pavlovic et al. 2006). Mark tried, but failed, to get through this serious prolonged period of mental ill-health without medical support—a not uncommon scenario where men perceive the need to access help and support for mental health as a sign of weakness, and, as Mark

confessed, seek to ‘*wear a mask*’ of normality and ‘*fake life*’ to hide the turmoil going on within. Seidler et al. (2016) suggest the predicament Mark found himself experiencing is not uncommon in men, whereby seeking help is perceived as an effeminate response, compromising traditional masculine norms (e.g. stoicism, control, strength) thus, reducing the likelihood of disclosing feelings and accessing necessary support (from professionals or informal networks). Further, men are 50% less likely than women to seek mental health help, and to ‘mask,’ as Mark put it, depressive symptoms until far too late as chronic depression reach dangerous levels (Seidler et al. 2016). Ultimately this led to Mark waking up one August day and resolving to end his life by hanging himself from a tree in the grounds of his own home. More violent means of suicide such as hanging is more likely amongst males (Hawton and van Heeringen 2009), as is the withdrawal and masking of emotions in the lead up to suicide, and the determined focus regarding taking one’s own life (Richardson et al. 2021). Indeed, Mark clearly recalled the events leading up to his attempted suicide, after resolving he was unable to reconcile the persistently negative emotions he had been grappling with, and having written a number of ‘goodbye’ letters to family and friends:

I am reminded that on this day August 16th, 2011, a shelled out empty, disconnected version of me, chose to check out on my terms. I felt ugly, stupid, worthless a burden a fraction of the man I once was. The word I remember most that summed up how I felt was ‘Invisible’.

This single-mindedness to ‘check out’ can be viewed as a means of diverting the troubled mind from the emotional turmoil and burden he was carrying, accompanied by feelings of hopelessness regarding his current existence. Fortunately, and despite also taking two whole packets of sleeping pills, the attempt failed. Mark even recollects hearing the voice of a friend who he had lost to cancer ten years previously:

...every fibre of me was filled with the feeling of my best friend... I just felt his energy around me. It’s making me emotional now... just powerful... but he was there.

Mark viewed this as his friend calling to him to join him, but with hindsight reflects he was most likely trying to dissuade him from this life-ending act. Even in that desperate moment, when the bough of the tree snapped as he began to swing, Mark saw the irony of his spiral into the lowest depths of absent self-worth:

I don’t know how long I was swinging for, but I remember hearing an almighty crack and thinking clearly, ‘Shit - that’s my neck broken’... the next thing I knew, I was on the floor rolling around, in the leaves, and I scrambled onto my knees and was looking up at the cord, severed on the tree, just wafting gently in the breeze... and I burst out laughing, hysterically, saying out loud, ‘you fucking idiot... you can’t even do that properly can you, you fucking idiot!’.

He desperately tried to find more rope to make another attempt, but then passed out, being found by family members on the staircase in the house. Mark was airlifted to a nearby hospital and remembers coming around with two nurses standing over him.

Part two: OWS as therapy

At the hospital, Mark recollects sitting up in bed, thinking about the enormity of what had occurred, his son, and sobbing uncontrollably, before experiencing an event equivalent to an epiphany:

...in that moment, the only way that I can describe to you is a force of energy hit me and pinned me back against the headboard, like energy coming into me. The only thing I can compare it to is driving in snow with your headlights on and those snowflakes coming at you, like flashing lights. I was pinned back. But in that energy was the most amazing, beautiful love, and knowledge, wisdom, and joy, and connection, that I have ever felt in my life... I cannot articulate. The word I use now and I share this word wherever I can, because for me it is life – it's 'wonderment'. So powerful is that energy that if it hit you now, you could follow it and leave everything behind that you are, because, you know in your heart you're not leaving anything behind because you're connected to it and everything else. And you would follow that in an instant. Without a doubt, so overpoweringly strong, it's that love, connection, wisdom, strength... it's coming from everywhere. And in that moment, I realised that I was a small, tiny piece of a huge jigsaw puzzle of life that extended beyond me, beyond Lincoln, beyond England, beyond the world, beyond the planets, beyond the universe, beyond infinity, in a way that you can't even comprehend, with different layers and different dimensions.

This was the beginning of Mark's relatively rapid rise back to regaining his love of life, his self-esteem and personal agency. He was prescribed Seroquel, an antipsychotic drug, but came off it voluntarily within two weeks as it '*wasn't helping*' and '*basically put me into a coma*', having been put on too high a dose (150 mg) compared to the recommended 50 mg. Anti-psychotic drugs, despite clear efficacy, are known to carry risks of significant side effects, and are not guaranteed to effectively treat the condition (García et al. 2016). Mark was remarkably prescient to sense he '*did not need drugs*' as '*it's not a long-term fix*'. For Mark, recovery essentially involved connecting to both nature and people:

...your body knows how to heal, how to repair itself, what it needs...it needs social interaction, friendship, communication, feeling that you're part of something, whether that's a community, or a tribe, or a friendship group, whatever it is, but having that purpose, having that feeling of belonging, whether belonging in nature or to a walking group, hiking group or cycling group - we need that interaction and we need that stimulation.

The connection to nature and its myriad forms of fauna and flora exudes hedonic and eudaimonic responses each time Mark references his engagement in blue spaces. The sense of 'wonderment' expressed as energy was characterised by a special moment between Mark and MC whilst conversing in the water:

We've seen two cuckoos together which is something I have never witnessed before in my life. That's an absolute first - how blessed are we (that) if we weren't next to the water here, now, that would never have happened. And you've got to think that that there's something in that, if we weren't meeting at this time, and at this place, we would have missed that opportunity, so maybe, that's the universe gifting us something right there.

Water itself was manifest as a vital component of nature connectedness and his mental health recovery:

...I think the connection is water. That water is - for want of a better description - the flow in you that you're connecting to, and so you know it's that connection with water that is key, whether that's a sea, a lake, or a river, you know it always delivers and yeah, I just love it all. I think when you're a water lover, you're a water lover, each one has its benefits. But at the end of the day, it's that connection with that living body of water, that energy, that is water connecting to you: you get that in a lake, a river, and the sea that you would never get in a swimming pool or a shower.

Nature, and dipping in cold water with friends, gave Mark the impetus to '*plug back*' into life, finding both stimuli '*healing and uplifting*':

...that's the intrinsic nature of being able to connect, share, listen, and enjoy... that's where love, life, and connection live, they live in the moments you share with people, and places, and living things... everything we're looking at now, from the dragonflies, water, trees, swans, and geese to the sky, the sun. It's all living energy... and I guess there's a little bit of that light, that was flashing towards me [in hospital] in everything I see. You look at that dragonfly and I see dancing light energy, look at it, it's beautiful, got its own little rhythm, own little dance, and then you're aware of all the other little dragonflies that are with it now... it's just connection, connection, connection... I have such an appreciation of life now.

His choice of cold-water therapy was a personal one, not encouraged by others, prompted by Mark's childhood practice of immersing his head in cold water every morning as a teenager:

...I would come back up, catch my breath and then I'd do it 10 times, counting 1-2-3 until I got head freeze, and then I'd splash my face again after, a routine I've used since I was 15, to wake me up in the morning. So, I already had that kind of connection and I always cold water showered in the summer just to cool off. And then I saw the research that was starting to come out on the benefits of cold-water, how it helped emotional health.

Mark was proactive in using social media to announce his intentions to '*embrace*' cold water therapy, forming a 'Cold Water Warriors' group which, over time, has grown to scores of like-minded dippers typically in local rivers and lakes, and his own Facebook page attracting over 2.5k followers. He also penned a book detailing his battle with ill-health and subsequent path to recovery, and the tools, including cold water immersion, to facilitate positive change. His favourite blue spaces for engaging in wild dipping and/or swimming includes the lake involved with his interview, but also regular trips to UK destinations including the Lake District (Figure 7), and Cornwall (Figure 8), which he describes as '*a dipper's paradise*'. Another favoured location is Auburn Weir, with his senses stimulated by the '*flowing water*'.

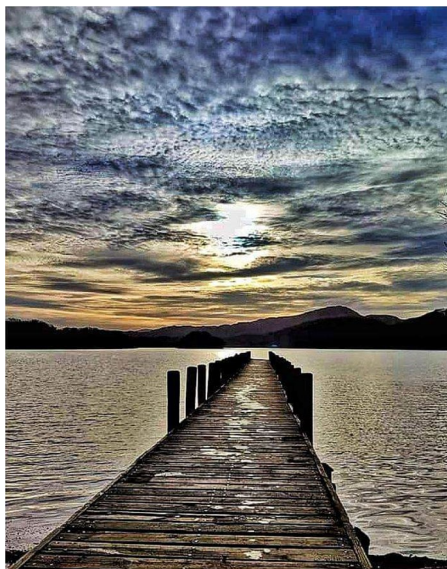


Figure 7. Mark's photograph of a restorative swimming spot in the Lake District. Source: Author.



Figure 8. St Michael's Mount Cornwall in November on holiday with his son: *'It was a pretty wet and grey three days. I was determined to go in and as I was stripping off, the clouds parted to the left and the sun broke through as I walked towards the water. I had a lovely 20-minute dip, saying my affirmations, connecting to the water, the energy... it was definitely a 'Moment'.* Source: Author.

Part three: here and now

Mark is medication free and has established 'a new version' of himself with a role as a life coach and requalified hypnotherapist. Rather than regret and seek to ignore his troubled past, instead he is grateful for it, as he believes he has become:

...more connected, wiser, stronger, more compassionate, [become] a better listener and a much better version of me than I've ever been because of all that suffering.

His new outlook on life eschews materialism:

...I've lost financially. Maybe the best part of a quarter of a million pounds in the last 10 years
- I am poorer materialistically than in the past and yet richer, far richer than I have ever been.

He promotes self-resilience and stress management through a self-styled system that includes a 'fuck bucket' to visualise dumping negative thoughts and issues; ignoring the 'megabytes' and 'Mood Hoovers' who try to belittle others through intentional, barbed comments; and his 'positivity bat' for 'knocking bad thoughts out of the park'. These tools are now shared with his own clients as a means of enhancing their self-esteem, confidence, and resilience. He requalified a year after his attempted suicide as a practising hypnotherapist. This provided a means of giving him a clear focus when he was taking the first awkward steps to recovery, gradually building his self-confidence despite minor setbacks, and recapturing his sense of purpose and enthusiasm for life in general. Part of this newfound approach to managing the risk of lows was the use of daily affirmations (whilst pouring three buckets of cold lake water over his head) including 'come get me life' as opposed to

the darkest moment in his life when he recalls exclaiming '*come get me death*'. Helping others overcome their own mental ill health reinforces his self-belief and provides a sense of joy as well as purpose: '*...how blessed am I*'. Given the central role nature connectedness has played in his own recovery (Figure 9), Mark is passionate to utilise OWS, whether dipping or swimming, to assist others (Figure 10):

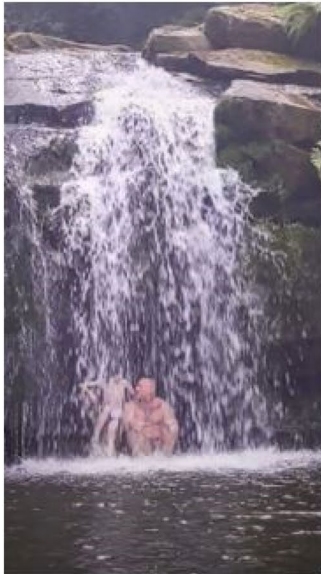
...that's my job now. There's no greater way to help people to connect and plug in than in nature and in water. Water is an intrinsic part of us, we are 72% water, water is vital to life, vital to every component of you. And all that you're doing is waking that up in people - it's already there, they just don't know it.

As such, Mark uses references to the surge of energy he experienced in the hospital, to convey to clients how they too can tap into the same energy: '*...and that's why I get results other people don't get*'. Whilst Mark has an unselfish desire to facilitate positive outcomes for others, he does recognise his own limits, another sign that he is aware of the need to avoid overcommitting and compromising his own health. This was acknowledged when he set up a 'Growing and Glowing' walking group with sixty regular participants in the early days after the suicide attempt, which became time consuming and demanding to manage. He sensibly saw the warning signs of managing both his new job and this voluntary commitment, feeling '*the hand [of 'Death'] on my shoulder*' and his psychological status '*dipping*', as listening to other people's issues, and constant messaging at all times of the day, encroached on his own down time. He successfully disentangled himself from the management of the group (it still exists, but without Mark at the helm), enabling him to regain equilibrium in his work/life balance. Later, as he embraced wild dipping and swimming, he found the more casual, relaxed vehicle of 'Cold Water Warriors' was less onerous to invest personal time towards.



Figure 9. Mark expressing the joy of OWS at his local lake (Go Pro image by MC).

MARK (FB entry 2021):



'I love this photo... it represents the one word we all need in our lives most 'connection'. We can't love without it, we have no joy or purpose without it. This is me introducing 'JJ' to the joys of swimming in nature. That water was cold, fresh rainwater coming off the hills at Beck Hole in the heart of the Yorkshire Moors. He loved it, a bigger rush and connection than any games console or virtual experience can give him, life connecting to life, that he will hopefully remember all of his life. He jumped in off the same rock I did, fearless and brave at 10 years old. Mum watching, heart in her mouth, swelling with love and pride for her brave little soldier. She put total love, trust, and faith in me, as did he, connection is a powerful thing. I am reminded that on this day August the 16th 2011, a shelled out empty, disconnected version of me, chose to check out on my terms. I felt ugly, stupid, worthless a burden a fraction of the man I once was. The word I remember most that summed up how I felt was 'Invisible'. YOU right now may be feeling the same, there will be many reasons for that, many out of your control. But none of them a good enough reason to give up on you, life. I can only tell you, that coming through the other side of that hardest of journeys is worth all the pain of getting there. Wisdom IS the gift of suffering, we all shall suffer, it is where strength and courage are formed. To put one foot in front of another, to keep looking up, moving forward. I have had so many beautiful moments, met so many beautiful souls, and been blessed to help others in their darkest times, since the miracle of surviving my darkest day. We must never let go of our inner child, keep climbing trees, rolling down hills and seeking out new places to dip/swim and adventure. This is all life wants for us, asks of us. We only find that connection in living things, water is just one of them. We must be grateful for these moments, more so after that pain we go through. So, we can view each day and moments in it, with the wide-eyed wonder of a child again. Happiness is not a destination but simply being present, connecting fully in the moment of now, appreciating all that's in it, being grateful for all you already have, how rich in life's blessings you already are. I hope these words resonate with you: have a positive and productive day, wherever you are reading this.'

Figure 10. Facebook post by Mark.

Discussion

The personal testimonies presented herein highlight the role OWS has played in the interviewees' mental health recovery and importantly as a suppressor of suicide ideation. As Kathleen pointed out, for her OWS was a 'life saver'; this being particularly so during the Covid pandemic lockdowns - a point underscored in research conducted by Pouso et al. (2021) as to the beneficial impact of OWS on people's mental health. Within the key themes (Table 1) numerous references were made to mediators that align with the tenets of Stress Reduction Theory (Ulrich et al. 1991), the Biophilia Hypothesis (Kellert and Wilson 1993), Attention Restoration Theory (Kaplan 1995) as well as the psycho-physical benefits derived from cold-water immersion (Knechtle et al. 2020). For example, the association with the natural environment, in that OWS offered the interviewees a place of solace through which they could embrace life and 'grow' as individuals. Both also recalled positive childhood memories of being in and around water as influencing their current selves. It provided mental and physical healing, with Mark stating that he considered OWS as akin to a 'natural' health service. The salutary effects were so profound that he extolled such benefits to others. The multitude of psychophysical benefits derived from OWS has been reported by others (e.g. Fullager and O'Brien 2018; Denton and Aranda 2020; Christie and Elliott 2023). However, this is the first investigation to show the magnitude of these effects to be such that they can help alleviate what might be considered severe psychophysical ailments. The development of social bonds through OWS was another crucial factor in the psychological rehabilitation process. Strong social networks and the enhancements to personal agency that derived from such interactions are essential elements in protecting against future depressive episodes and can assist and sustain the recovery process (Sun and Long 2013). As Slade (2009) and Fullager and O'Brien (2018) suggest, contemporary mental health recovery should indeed seek to stress the importance of relational factors in reducing reliance on medical interventions for such conditions.

There were also secondary 'life' benefits. Their introduction to OWS encouraged both interviewees to become involved in volunteering which helped them to regain their sense of self-worth and self-esteem. Voluntary work has indeed been shown to be a positive influence on psycho-social and physical health (Yeung, Zhang, and Kim 2017). However, it is acknowledged that mental health can deteriorate due to over-commitment. Volunteering led Mark and Kathleen to seek out educational routes to further enhance personal agency. Such a course of action can be a route to not only better holistic life outcomes, including economic security, enhanced self-esteem and feeling valued, but also another means of promoting recovery from acute mental ill-health (Yeung, Zhang, and Kim 2017), engendering a sense of hope and a more positive future, especially when coupled with improved health and wellbeing (Miller 1992). Kathleen was now contemplating enrolling on a PhD programme whilst Mark, having retrained as a hypnotherapist, was now looking to train other therapists within his newfound, expanding business portfolio.

Notwithstanding the perceived benefits, it must be recognised that OWS is not argued as offering a definitive 'cure'. Kathleen's continuing issues in managing her own physical health and those of her two sons, are reminders of how fragile recovery can be, and that the process can be hampered by contemporary and unanticipated life events. Both Mark and Kathleen are sanguine about the potential for setbacks, if more minor in scale than they were prior to OWS engagement but demonstrate an accepted reality: *'that's life'*.

However, as with other forms of physical activity (e.g. Deuster and Silverman 2013) OWS did appear to enhance resilience; that is, the ability to recover, grow, and withstand life's challenges (*'it always gets me through it'* says Mark; whilst *'if I've had a bad day, as soon as I walk in the water, I feel it all just drifting away – I've never looked back'* says Kathleen). It was apparent that they were engaging in effective, personalised strategies to mitigate negative developments and their potential for disruption to their recovering selves. Such self-developed coping strategies are crucial in retrieving self-esteem and self-confidence, as well as mitigating potential for negativity and stress moving forwards (Sun and Long 2013). This development contrasts with their previous selves in which resilience was somewhat absent. Whilst Kathleen is still dependent on medical interventions to manage her multiple physical ailments, with anti-depressants for associated bouts of depression due to the pain she endures, Mark—perhaps untypically for those recovering from suicide attempts—has managed to be medication free. Importantly, since both became regular OWS participants and proponents, they have experienced no further suicide ideation.

In conclusion, the testimonies provided, in conjunction with previous research, suggests that OWS is an ideal activity through which to develop a connectedness with nature and promote the associated positive impacts upon health and well-being. For the participants in the current study, involvement in OWS led to personal health dividends and enhancements to personal agency; factors considered as important elements in mental health recovery (Yates, Holmes, and Priest 2012). Throughout the discourse, statements were made that the notion of nature connectedness, hope and optimism about the future, identity, meaning in life and empowerment play a key role in alleviating serious mental health conditions (Leamy et al. 2011). The testimonies also ally with the concept of 'emplacement' (Pink 2011); that is, recovery as being shaped by both formal and informal processes: for example, engagement with formal medical services, but also by multiple, less obvious, relational elements, including nature, social networks (work, leisure, volunteering) and therapeutic landscapes (perceived as healing spaces). As to whether involvement in OWS saved their lives, this obviously cannot be asserted with any certainty, however, it does appear that OWS was the catalyst for positive change and did ultimately make life worth living. It is worth acknowledging that OWS will not be an attractive or indeed, obtainable option to all those experiencing severe mental health issues. Access to BS might be difficult for many without transport and/or financial security; the cost of swimming lessons, wet suits, and travel might be prohibitive. Time constraints could be an additional barrier as not everyone resides in the vicinity of BS environments. It should also be recognised that OWS whilst providing many benefits, can itself cause health issues, for example, cold-water shock, after-drop and hyperthermia are very real risks (Tipton and Bradford 2014; Tipton et al. 2017). Such contraindications should be considered by those contemplating OWS. In instances where OWS is not an option, GE might be a viable alternative given that it not only provides similar benefits, without the potential dangers associated with open water, GS is also likely to be more readily accessible in the form of urban parks, fields and woodlands.

The authors recognise that due the study design, generalisations cannot be made. As such, further research is required to determine whether such nature-bound BE activities can have a positive and sustained impact upon suicide ideation. Therefore, at this stage, OWS should not be considered a substitute to empirically sound medical interventions, rather as an activity that *might* be used in conjunction with other methods to help those suffering with suicidal tendencies.

Disclosure statement

No potential conflict of interest was reported by the author(s).

References

- Ahmad, A. M. 2022. "The Benefits of Physical Exercises for Mental Health in the COVID-19 Era: An Indirect Role for Suicide Prevention." *Neuropsychiatry and Neuropsychology* 17 (1): 122–123.
- Armstrong, J. 2010. *Naturalistic Inquiry. Encyclopaedia of Research Design: Naturalistic Inquiry*. London: SAGE.
- Baker, C. 2022. Suicide Statistics. London: House of Commons Library. <https://commonslibrary.parliament.uk/research-briefings/cbp-7749/>.
- Bates, C., and K. Moles. 2022. "Bobbing in the Park: Wild Swimming, Conviviality and Belonging." *Leisure Studies* 1–13. <https://doi.org/10.1080/02614367.2022.2085774>.
- Becker, B. E. 2009. "Aquatic Therapy: Scientific Foundations and Clinical Rehabilitation Applications." *PM & R: The Journal of Injury, Function, and Rehabilitation* 1 (9): 859–872. <https://doi.org/10.1016/j.pmrj.2009.05.017>.
- Braun, V., and V. Clarke. 2019. "Reflecting on Reflexive Thematic Analysis." *Qualitative Research in Sport, Exercise and Health* 11 (4): 589–597. <https://doi.org/10.1080/2159676X.2019.1628806>.
- Britton, E., G. Kindermann, C. Domegan, and C. Carlin. 2020. "Blue Care: A Systematic Review of Blue Space Interventions for Health and Wellbeing." *Health Promotion International* 35 (1): 50–69. <https://doi.org/10.1093/heapro/day103>.
- Broach, E., and J. Dattilo. 1996. "Aquatic Therapy. Making Waves in Therapeutic Recreation." *Parks and Recreation* 31: 38–43.
- Broach, E., and A. McKenney. 2012. "Social Fun and Enjoyment: Viable Outcomes in Aquatics for Individuals with Physical Disabilities." *International Journal of Aquatic Research and Education* 6 (2): 8. <https://doi.org/10.25035/ijare.06.02.08>.
- Burke, Taylor A., Ross Jacobucci, Brooke A. Ammerman, Marilyn Piccirillo, Michael S. McCloskey, Richard G. Heimberg, Lauren B. Alloy, et al. 2018. "Identifying the Relative Importance of Non-Suicidal Self-Injury Features in Classifying Suicidal Ideation, Plans, and Behavior Using Exploratory Data Mining." *Psychiatry Research* 262: 175–183. <https://doi.org/10.1016/j.psychres.2018.01.045>.
- Capaldi, C.A., H. Passmore, E. Nisbet, J. M. Zelenski, and R. L. Dopko. 2015. "Flourishing in Nature: A Review of the Benefits of Connecting with Nature and Its Application as a Wellbeing Intervention." *International Journal of Wellbeing* 5 (4): 1–16. <https://doi.org/10.5502/ijw.v5i4.449>.
- Charmaz, Kathy. 2006. *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*. London (UK): Sage Publications.
- Chen, X., Y. Fu, Q. Zou, Q. Zhang, X. Qin, Y. Tian, Y. Yan, et al. 2022. "A Retrospective Case Series of Electroconvulsive Therapy in the Management of Depression and Suicidal Symptoms in Adolescents." *Brain and Behavior* 12 (11): e2795. <https://doi.org/10.1002/brb3.2795>.
- Christie, M. A., and D. Elliott. 2023. "I Get Headspace Here... You Forget Everything When in Open Water': Motives for Participation and Perceived Benefits Derived from Open Water Swimming: A Rapid Ethnographic Study." *Sport in Society* 26 (12): 2108–2131. <https://doi.org/10.1080/17430437.2023.2233428>.
- Denton, H., and K. Aranda. 2020. "The Wellbeing Benefits of Sea Swimming. is It Time to Revisit the Sea Cure?" *Qualitative Research in Sport, Exercise and Health* 12 (5): 647–663. <https://doi.org/10.1080/2159676X.2019.1649714>.
- DermNet New Zealand Trust. 2023. "Lipoedema." Accessed July 16, 2023. <https://dermnetnz.org/topics/lipoedema-definition-and-pathogenesis>.
- Deuster, P. A., and M. N. Silverman. 2013. "Physical Fitness: A Pathway to Health and Resilience." *U.S. Army Medical Department Journal* : 24–35.

- Fernandez-Rodrigues, V., Y. Sanchez-Carro, L. N. Lagunas, L. A. Rico-Urbe, A. Pemau, P. Diaz-Carracedo, M. Diaz-Marsa, et al. 2022. "Risk Factors for Suicidal Behaviour in Late-Life Depression: A Systematic Review." *World Journal of Psychiatry* 12 (1): 187–203. <https://doi.org/10.5498/wjp.v12.i1.187>.
- Foley, R. 2015. "Swimming in Ireland: Immersions in Therapeutic Blue Space." *Health & Place* 35: 218–225. <https://doi.org/10.1016/j.healthplace.2014.09.015>.
- Foley, R., and T. Kistemann. 2015. "Blue Space Geographies: Enabling Health in Place." *Health & Place* 35: 157–165. <https://doi.org/10.1016/j.healthplace.2015.07.003>.
- Fullager, S., and W. O'Brien. 2018. "Rethinking Women's Experiences of Depression and Recovery as Emplacement: Spatiality, Care and Gender Relations in Rural Australia." *Journal of Rural Studies* 58: 12–19.
- García, S., M. Martínez-Cengotitabengoa, S. López-Zurbano, I. Zorrilla, P. López, E. Vieta, and A. González-Pinto. 2016. "Adherence to Antipsychotic Medication in Bipolar Disorder and Schizophrenic Patients: A Systematic Review." *Journal of Clinical Psychopharmacology* 36 (4): 355–371. PMID: 27307187; PMCID: PMC4932152. <https://doi.org/10.1097/JCP.0000000000000523>.
- Gladwell, V. F., D. K. Brown, C. Wood, G. R. Sandercock, and J. L. Barton. 2013. "The Great Outdoors: How a Green Exercise Environment Can Benefit All." *Extreme Physiology & Medicine* 2 (1): 3. <https://doi.org/10.1186/2046-7648-2-3>.
- Grasdalsmoen, Michael, Hege Randi Eriksen, Kari Jussie Lønning, and Børge Sivertsen. 2020. "Physical Exercise, Mental Health Problems, and Suicide Attempts in University Students." *BMC Psychiatry* 20 (1): 175. <https://doi.org/10.1186/s12888-020-02583-3>.
- Grellier, J., M. P. White, M. Albin, S. Bell, L. R. Elliott, M. Gascón, S. Gualdi, et al. 2017. "BlueHealth: A Study Programme Protocol for Mapping and Quantifying the Potential Benefits to Public Health and Well-Being from Europe's Blue Spaces." *BMJ open* 7 (6): e016188. <https://doi.org/10.1136/bmjopen-2017-016188>.
- Haeffner, M., D. Jackson-Smith, M. Buchert, and J. Risley. 2017. "Accessing Blue Spaces: Social and Geographic Factors Structuring Familiarity with, Use of, and Appreciation of Urban Waterways." *Landscape and Urban Planning* 167: 136–146. <https://doi.org/10.1016/j.landurbplan.2017.06.008>.
- Hadzi-Pavlovic, D., S. Quinn, G. Parker, P. Mitchell, K. Wilhelm, H. Brodaty, et al. 2006. "Predictors of Suicide in Major Depressive Disorder: A Follow-Up of Patients Seen at a Specialist Mood Disorders Unit." *Acta Neuropsychiatry* 18: 290. <https://doi.org/10.1017/S.0924270800031276>.
- Hallgren, M., B. Stubbs, D. Vancampfort, A. Lundin, P. Jääkallio, and Y. Forsell. 2017. "Treatment Guidelines for Depression: Greater Emphasis on Physical Activity is Needed." *European Psychiatry: The Journal of the Association of European Psychiatrists* 40: 1–3. <https://doi.org/10.1016/j.eurpsy.2016.08.011>.
- Hawton, K., and K. van Heeringen. 2009. "Suicide." *Lancet (London, England)* 373 (9672): 1372–1381. [https://doi.org/10.1016/S0140-6736\(09\)60372-X](https://doi.org/10.1016/S0140-6736(09)60372-X).
- Hawton, K., C. C. I. Comabella, C. Haw, and K. Saunders. 2013. "Risk Factors for Suicide in Individuals with Depression: A Systematic Review." *Journal of Affective Disorders* 147 (1–3): 17–28. <https://doi.org/10.1016/j.jad.2013.01.004>.
- Hofstra, E., C. van Nieuwenhuizen, M. Bakker, D. Özgül, I. Elfeddali, S. J. de Jong, and C. M. van der Feltz-Cornelis. 2020. "Effectiveness of Suicide Prevention Interventions: A Systematic Review and Meta-Analysis." *General Hospital Psychiatry* 63: 127–140. <https://doi.org/10.1016/j.genhosppsych.2019.04.011>.
- Holmes, G., A. Clacy, D. F. Hermens, and J. Lagopoulos. 2021. "The Long-Term Efficacy of Suicide Prevention Gatekeeper Training: A Systematic Review." *Archives of Suicide Research: Official Journal of the International Academy for Suicide Research* 25 (2): 177–207. <https://doi.org/10.1080/13811118.2019.1690608>.
- Huttunen, P., L. Kokko, and V. Ylijukuri. 2004. "Winter Swimming Improves General Well-Being." *International Journal of Circumpolar Health* 63 (2): 140–144. <https://doi.org/10.3402/ijch.v63i2.17700>.
- Jenkins, M., C. Lee, S. Houge Mackenzie, E. A. Hargreaves, K. Hodge, and J. Calverley. 2022. "Nature-Based Physical Activity and Hedonic and Eudaimonic Wellbeing: The Mediating Roles

- of Motivational Quality and Nature Relatedness.” *Frontiers in Psychology* 13: 783840. <https://doi.org/10.3389/fpsyg.2022.783840>.
- Kajosaari, Anna, and T. P. Pasanen. 2021. “Restorative Benefits of Everyday Green Exercise: A Spatial Approach.” *Landscape and Urban Planning* 206: 103978. <https://doi.org/10.1016/j.landurbplan.2020.103978>.
- Kaplan, S. 1995. “The Restorative Benefits of Nature: Towards an Integrative Framework.” *Journal of Environmental Psychology* 15 (3): 169–182. [https://doi.org/10.1016/0272-4944\(95\)90001-2](https://doi.org/10.1016/0272-4944(95)90001-2).
- Kellert, S. R., and E. O. Wilson. 1993. *The Biophilia Hypothesis*. Washington (DC): Island Press.
- Khorvash, M., A. Askari, F. Rafiemanzelat, M. Botshekan, and F. Khorvash. 2012. “An Investigation on the Effect of Strength and Endurance Training on Depression, Anxiety, and C-Reactive Protein’s Inflammatory Biomarker Changes.” *Journal of Research in Medical Sciences* 17: 1072–1076.
- Knechtle, B., Z. Waskiewicz, C. V. Sousa, L. Hill, and P. T. Nikolaidis. 2020. “Cold Water Swimming—Benefits and Risks: A Narrative Review.” *International Journal of Environmental Research and Public Health* 17 (23): 8984. <https://doi.org/10.3390/ijerph17238984>.
- Kredlow, M. A., M. C. Capozzoli, B. A. Hearon, A. W. Calkins, and M. W. Otto. 2015. “The Effects of Physical Activity on Sleep: A Meta-Analytic Review.” *Journal of Behavioral Medicine* 38 (3): 427–449. <https://doi.org/10.1007/s10865-015-9617-6>.
- Kurniasari, M. D., K. A. Monsen, S. F. Weng, Y. C. Yang, and H. T. Tsai. 2022. “Cold Water Immersion Directly and Mediated by Alleviated Pain to Promote Quality of Life in Indonesian with Gout Arthritis: A Community-Based Randomized Controlled Trial.” *Biological Research for Nursing* 24 (2): 245–258. <https://doi.org/10.1177/10998004211063547>.
- Lazar, J., J. H. Feng, and H. Hochheiser. 2017. *Research Methods in Human Computer Interaction*, 2nd ed., 153–185. Cambridge: Morgan Kaufmann. <https://doi.org/10.1016/B978-0-12-805390-4.00007-8>.
- Leamy, M., V. Bird, C. Le Boutillier, J. Williams, and M. Slade. 2011. “Conceptual Framework for Personal Recovery in Mental Health: Systematic Review and Narrative Synthesis.” *The British Journal of Psychiatry: The Journal of Mental Science* 199 (6): 445–452. <https://doi.org/10.1192/bjp.bp.110.083733>.
- Leavell, M. A., J. A. Leiferman, M. Gascon, F. Braddick, J. C. Gonzalez, and J. S. Litt. 2019. “Nature-Based Social Prescribing in Urban Settings to Improve Social Connectedness and Mental Well-Being: A Review.” *Current Environmental Health Reports* 6 (4): 297–308. <https://doi.org/10.1007/s40572-019-00251-7>.
- Lee, E. S., M. A. Maillet, and F. M. Grouzet. 2022. “Why Do Individuals Engage with the Natural World? A Self-Determination Theory Perspective on the Effect of Nature Engagement and Well-Being.” *Applied Research in Quality of Life* 17 (3): 1501–1532. <https://doi.org/10.1007/s11482-021-09970-2>.
- Loureiro, Nuno, Luís Calmeiro, Adilson Marques, Diego Gomez-Baya, and Margarida Gaspar de Matos. 2021. “The Role of Blue and Green Exercise in Planetary Health and Well-Being.” *Sustainability* 13 (19): 10829. <https://doi.org/10.3390/su131910829>.
- Massey, H., N. Kandala, C. Davis, M. Harper, P. Gorczynski, and H. Denton. 2020. “Mood and Well-Being of Novice Open Water Swimmers and Controls during an Introductory Outdoor Swimming Programme: A Feasibility Study.” *Lifestyle Medicine* 1 (2): e12. <https://doi.org/10.1002/lim2.12>.
- Massey, H., P. Gorczynski, C. M. Harper, L. Sansom, K. McEwan, A. Yankouskaya, and H. Denton. 2022. “Perceived Impact of Outdoor Swimming on Health: Web-Based Survey.” *Interactive Journal of Medical Research* 11 (1): e25589. <https://doi.org/10.2196/25589>.
- Merriam, S. B., and E. J. Tisdell. 2015. *Qualitative Research: A Guide to Design and Implementation*. San Francisco, CA: Wiley.
- Miller, J. F. 1992. *Coping with Chronic Illness: Overcoming Powerlessness*. 2nd ed. Philadelphia, PA: Davis.
- Moffatt, F. 2017. “The Individual Physical Health Benefits of Swimming: A Literature Review.” In *The Health & Wellbeing Benefits of Swimming: Individually, Societally, Economically, Nationally*, 8–25. Loughborough: Swim England.
- Mondada, L. 2014. “Ethics in Action: Anonymization as a Participant’s Concern and a Participant’s Practice.” *Human Studies* 37 (2): 179–209. <https://doi.org/10.1007/s10746-013-9286-9>.

- Murray, E., and J. Fox. 2021. "The Meaning of Open-Water Swimming for Adults in Ireland: A Qualitative Study." *Irish Journal of Occupational Therapy* 49 (2): 89–95. <https://doi.org/10.1108/IJOT-10-2020-0016>.
- NHS Digital. 2016. "Adult Psychiatric Morbidity Survey: Survey of Mental Health and Wellbeing, England, 2014." Accessed March 23, 2024. <https://digital.nhs.uk/data-and-information/publications/statistical/adult-psychiatric-morbidity-survey/adult-psychiatric-morbidity-survey-survey-of-mental-health-and-wellbeing-england-2014>
- NHS. 2020. *Lipoedema*. Accessed July 14, 2023. <https://www.nhs.uk/conditions/lipoedema/>
- Ning, K., C. Yan, Y. Zhang, and S. Chen. 2022. "Regular Exercise with Suicide Ideation, Suicide Plan and Suicide Attempt in University Students: Data from the Health Minds Survey 2018–2019." *International Journal of Environmental Research and Public Health* 19 (14): 8856. <https://doi.org/10.3390/ijerph19148856>.
- Nowell, L. S., J. M. Norris, D. E. White, and N. J. Moules. 2017. "Thematic Analysis: Striving to Meet the Trustworthiness Criteria." *International Journal of Qualitative Methods* 16 (1): 160940691773384. <https://doi.org/10.1177/1609406917733847>.
- Nutsford, D., A. L. Pearson, S. Kingham, & F. Reitsma. 2016. "Residential Exposure to Visible Blue Space (but Not Green Space) Associated with Lower Psychological Distress in a Capital City." *Health & Place* 39: 70–78. <https://doi.org/10.1016/j.healthplace.2016.03.002>.
- ONS (Office for National Statistics). 2023. "Suicides in England and Wales: 2022 Registrations." Accessed March 28, 2024. <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2022registrations>
- Orsolini, L., R. Latini, M. Pompili, G. Serafini, U. Volpe, F. Vellante, M. Fornaro, et al. 2020. "Understanding the Complex of Suicide in Depression: From Research to Clinics." *Psychiatry Investigation* 17 (3): 207–221. <https://doi.org/10.30773/pi.2019.0171>.
- Passmore, H. A., and A. J. Howell. 2014. "Nature Involvement Increases Hedonic and Eudaimonic Well-Being: A Two-Week Experimental Study." *Ecopsychology* 6 (3): 148–154.
- Pedersen, B. K., and B. Saltin. 2015. "Exercise as Medicine - Evidence for Prescribing Exercise as Therapy in 26 Different Chronic Diseases." *Scand J Med Sci Sports*. 25 (3): 1–72.
- Pink, S. 2011. "From Embodiment to Emplacement: Re-thinking Competing Bodies, Senses and Spatialities." *Sport, Education and Society* 16 (3): 343–355. <https://doi.org/10.1080/13573322.2011.565965>.
- Pouso, S., A. Borja, L. E. Fleming, E. Gómez-Baggethun, M. P. White, and M. C. Uyarra. 2021. "Contact with Blue-Green Spaces During the COVID-19 Pandemic Lockdown Beneficial for Mental Health." *The Science of the Total Environment* 756: 143984. <https://doi.org/10.1016/j.scitotenv.2020.143984>.
- Pritchard, A., M. Richardson, D. Sheffield, and K. McEwan. 2020. "The Relationship between Nature Connectedness and Eudaimonic Well-Being: A Meta-Analysis." *Journal of Happiness Studies* 21 (3): 1145–1167. <https://doi.org/10.1007/s10902-019-00118-6>.
- Richardson, Cara, Adele Dickson, Kathryn A. Robb, and Rory C. O'Connor. 2021. "The Male Experience of Suicide Attempts and Recovery: An Interpretative Phenomenological Analysis." *International Journal of Environmental Research and Public Health* 18 (10): 5209. <https://doi.org/10.3390/ijerph18105209>.
- Rosa, C. D., C. C. Profice, and S. Collado. 2018. "Nature Experiences and Adults' Self-Reported Pro-Environmental Behaviors: The Role of Connectedness to Nature and Childhood Nature Experiences." *Frontiers in Psychology* 9: 1055. <https://doi.org/10.3389/fpsyg.2018.01055>.
- Rosenbaum, S., D. Vancampfort, Z. Steel, J. Newby, P. B. Ward, and B. Stubbs. 2015. "Physical Activity in the Treatment of Post-Traumatic Stress Disorder: A Systematic Review and Meta-Analysis." *Psychiatry Research* 230 (2): 130–136. <https://doi.org/10.1016/j.psychres.2015.10.017>.
- Saqib, Z. A., J. Dai, R. Menhas, S. Mahmood, M. Karim, X. Sang, and Y. Weng. 2020. "Physical Activity is a Medicine for Non-Communicable Diseases: A Survey Study regarding the Perception of Physical Activity Impact on Health Wellbeing." *Risk Management and Healthcare Policy* 13: 2949–2962. <https://doi.org/10.2147/RMHP.S280339>.
- Schuch, F. B., D. Vancampfort, J. Richards, S. Rosenbaum, B. Philip, B. Ward, and B. Stubbs. 2016. "Exercise as a Treatment for Depression: A Meta-Analysis Adjusting for Publication Bias." *Journal of Psychiatric Research* 77: 42–51. <https://doi.org/10.1016/j.jpsychires.2016.02.023>.

- Seidler, Z. E., A. J. Dawes, S. M. Rice, J. L. Oliffe, and H. M. Dhillon. 2016. "The Role of Masculinity in Men's Help-Seeking for Depression: A Systematic Review." *Clinical Psychology Review* 49: 106–118. <https://doi.org/10.1016/j.cpr.2016.09.002>.
- Sharma, A., V. Madaan, and F. D. Petty. 2006. "Exercise for Mental Health." *Primary Care Companion to the Journal of Clinical Psychiatry* 8 (2): 106. <https://doi.org/10.4088/pcc.v08n0208a>.
- Simon, T. R., K. E. Powell, and A. C. Swann. 2004. "Involvement in Physical Activity and Risk for Nearly Lethal Suicide Attempts." *American Journal of Preventive Medicine* 27 (4): 310–315. <https://doi.org/10.1016/j.amepre.2004.07.003>.
- Slade, M. 2009. "The Contribution of Mental Health Services to Recovery." *Journal of Mental Health* 18 (5): 367–371. <https://doi.org/10.3109/09638230903191256>.
- Stake, R. E. 1995. *The Art of Case Study Research*. Thousand Oaks, CA: Sage.
- Stubbs, B. 2017. "The Public Health Benefits of Swimming: A Systematic Review." In *The Health & Wellbeing Benefits of Swimming* 5. Accessed April 12, 2023. <https://www.britishswimming.org/documents/1079/1>.
- Stubbs, B., D. Vancampfort, M. Hallgren, J. Firth, N. Veronese, M. Solmi, S. Brand, et al. 2018. "EPA Guidance on Physical Activity as a Treatment for Severe Mental Illness: A Meta-Review of the Evidence and Position Statement from the European Psychiatric Association (EPA), Supported by the International Organization of Physical Therapists in Mental Health (IOPTMH)." *European Psychiatry: The Journal of the Association of European Psychiatrists* 54: 124–144. <https://doi.org/10.1016/j.eurpsy.2018.07.004>.
- Sun, F. K., and A. Long. 2013. "A Suicidal Recovery Theory to Guide Individuals on Their Healing and Recovering Process Following a Suicide Attempt." *Journal of Advanced Nursing* 69 (9): 2030–2040. <https://doi.org/10.1111/jan.12070>.
- Suszek, H., M. Kofta, M., and M. Kopera. 2019. "Returning to the Present Moment: Thinking About One's Childhood Increases Focus on the Hedonistic Present." *The Journal of General Psychology* 146 (2): 170–199. <https://doi.org/10.1080/00221309.2018.1543646>.
- Swim England. 2019. "Key swimming statistics and findings." Accessed 15th July 2023. <https://www.swimming.org/swimengland/key-swimming-statistics/>
- Tanaka, H. 2009. "Swimming Exercise: Impact of Aquatic Exercise on Cardiovascular Health." *Sports Medicine (Auckland, N.Z.)* 39 (5): 377–387. <https://doi.org/10.2165/00007256-200939050-00004>.
- Thompson, C. W., P. Aspinall, and A. Montarzano. 2008. "The Childhood Factor: Adults' Visits to Green Places and the Significance of Childhood Experience." *Environment and Behavior* 40 (1): 111–143. <https://doi.org/10.1177/0013916507300119>.
- Thompson, N., and S. Wilkie. 2021. "I'm Just Lost in the World': The Impact of Blue Exercise on Participant Well-Being." *Qualitative Research in Sport, Exercise and Health* 13 (4): 624–638. <https://doi.org/10.1080/2159676X.2020.1761433>.
- Tilley, L., and K. Woodthorpe. 2011. "Is It the End for Anonymity as We Know It? A Critical Examination of the Ethical Principle of Anonymity in the Context of 21st Century Demands on the Qualitative Researcher." *Qualitative Research* 11 (2): 197–212. <https://doi.org/10.1177/1468794110394073>.
- Tipton, M., and C. Bradford. 2014. "Moving in Extreme Environments: Open Water Swimming in Cold and Warm Water." *Extreme Physiology & Medicine* 3 (1): 12. <https://doi.org/10.1186/2046-7648-3-12>.
- Tipton, M. J., N. Collier, H. Massey, J. Corbett, and M. Harper. 2017. "Cold Water Immersion: Kill or Cure?" *Experimental Physiology* 102 (11): 1335–1355. <https://doi.org/10.1113/EP086283>.
- Torre, Y. S., R. Wadea, V. Rosas, and K. L. Herbst. 2018. "Lipedema: Friend and Foe." *Hormone Molecular Biology and Clinical Investigation* 33 (1): 1–10. <https://doi.org/10.1515/hmbci-2017-0076>.
- Turecki, G., and D. A. Brent. 2016. "Suicide and Suicidal Behaviour." *Lancet (London, England)* 387 (10024): 1227–1239. [https://doi.org/10.1016/S0140-6736\(15\)00234-2](https://doi.org/10.1016/S0140-6736(15)00234-2).
- Ulrich, R. S., R. F. Simons, B. D. Losito, E. Fiorito, E. A. A. Miles, and M. Zelson. 1991. "Stress Recovery During Exposure to Natural and Urban Environments." *Journal of Environmental Psychology* 11 (3): 201–230. [https://doi.org/10.1016/S0272-4944\(05\)80184-7](https://doi.org/10.1016/S0272-4944(05)80184-7).
- Valente, S., and J. M. Saunders. 2004. "Barriers to Suicide Risk Management in Clinical Practice: A National Survey of Oncology Nurses." *Issues in Mental Health Nursing* 25 (6): 629–648. <https://doi.org/10.1080/01612840490472147>.

- Vancampfort, D., J. Firth, C. U. Correll, M. Solmi, D. Siskind, M. De Hert, R. Carney, et al. 2019. "The Impact of Pharmacological and Non-Pharmacological Interventions to Improve Physical Health Outcomes in People with Schizophrenia: A Meta-Review of Meta-Analyses of Randomized Controlled Trials." *World Psychiatry: Official Journal of the World Psychiatric Association (WPA)* 18 (1): 53–66. <https://doi.org/10.1002/wps.20614>.
- van der Feltz-Cornelis, C. M., M. Sarchiapone, V. Postuvan, D. Volker, S. Roskar, A. T. Grum, V. Carli, et al. 2011. "Best Practice Elements of Multilevel Suicide Prevention Strategies: A Review of Systematic Reviews." *Crisis* 32 (6): 319–333. <https://doi.org/10.1027/0227-5910/a000109>.
- Van Tulleken, C., M. Tipton, H. Massey, and C. M. Harper. 2018. "Open Water Swimming as a Treatment for Major Depressive Disorder." *BMJ Case Reports* 2018: bcr2018225007. <https://doi.org/10.1136/bcr-2018-225007>.
- Vasiliadis, H. M., A. Lesage, E. Latimer, and M. Seguin. 2015. "Implementing Suicide Prevention Programs: Costs and Potential Life Years Saved in Canada." *The Journal of Mental Health Policy and Economics* 18 (3): 147–155.
- Warren Peled, A., and E. A. Kappos. 2016. "Lipedema: Diagnostic and Management Challenges." *International Journal of Women's Health* 8: 389–395. <https://doi.org/10.2147/IJWH.S106227>.
- White, M. P., I. Alcock, J. Grellier, B. W. Wheeler, T. Hartig, S. L. Warber, A. Bone, M. H. Depledge, and L. E. Fleming. 2019. "Spending at Least 120 Minutes a Week in Nature is Associated with Good Health and Wellbeing." *Scientific Reports* 9 (1): 7730. <https://doi.org/10.1038/s41598-019-44097-3>.
- WHO (World Health Organization). 2021. "Suicide." Accessed July 5, 2023. <https://www.who.int/news-room/fact-sheets/detail/suicide>.
- WHO (World Health Organization). 2023. "World Health Statistics." Accessed July 5, 2023. <https://www.who.int/news/item/17-06-2021-one-in-100-deaths-is-by-suicide>
- Wilson, M. P., J. Kaur, L. Blake, A. Oliveto, R. Thompson, J. Pyne, L. Wolf, A. Paige Walker, A. Waliski, and K. Nordstrom. 2021. "Adherence to Guideline Creation Recommendations for Suicide Prevention in the Emergency Department: A Systematic Review." *The American Journal of Emergency Medicine* 50: 553–560. <https://doi.org/10.1016/j.ajem.2021.07.042>.
- Xerri, D. 2018. "Two Methodological Challenges for Teacher-Researchers: Reflexivity and Trustworthiness." *The Clearing House: A Journal of Educational Strategies, Issues, and Ideas* 91 (1): 37–41. <https://doi.org/10.1080/00098655.2017.1371549>.
- Yates, I., G. Holmes, and H. Priest. 2012. "Recovery, Place, and Community Mental Health Services." *Journal of Mental Health (Abingdon, England)* 21 (2): 104–113. <https://doi.org/10.3109/09638237.2011.613957>.
- Yeung, J. W. K., Z. Zhang, and T. Y. Kim. 2017. "Volunteering and Health Benefits in General Adults: Cumulative eEffects and Forms." *BMC Public Health* 18 (1): 8. <https://doi.org/10.1186/s12889-017-4561-8>.
- Yin, R. K. 2014. *Case Study Research Design and Methods*. 5th ed. Thousand Oaks, CA: Sage.
- Zalsman, G., K. Hawton, D. Wasserman, K. van Heeringen, E. Arensman, M. Sarchiapone, J. Zohar, et al. 2016. "Suicide Prevention Strategies Revisited: 10-Year Systematic Review." *The Lancet. Psychiatry* 3 (7): 646–659. [https://doi.org/10.1016/S2215-0366\(16\)30030-X](https://doi.org/10.1016/S2215-0366(16)30030-X).
- Zucker, D. M. 2009. "How to Do Case Study Research." School of Nursing Faculty Publication Series. Paper 2. http://scholarworks.umass.edu/nursing_faculty_pubs/2.